

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-Q**

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

**For the quarterly period ended September 27, 2019**

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

**For the transition period from            to**

**Commission file number 001-15885**

**MATERION CORPORATION**

(Exact name of Registrant as specified in charter)

**Ohio**

(State or other jurisdiction of incorporation or organization)

**34-1919973**

(I.R.S. Employer Identification No.)

**6070 Parkland Blvd., Mayfield Heights, Ohio 44124**

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code:

**(216)-486-4200**

Securities registered pursuant to Section 12(b) of the Act:

| Title of each class        | Trading Symbol(s) | Name of each exchange on which registered |
|----------------------------|-------------------|---|
| Common Stock, no par value | MTRN              | New York Stock Exchange                   |

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer

Non-accelerated filer  Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

Number of Shares of Common Stock, without par value, outstanding at September 27, 2019: 20,402,976.

**PART 1 - FINANCIAL INFORMATION**

**Item 1. Financial Statements**

**Materion Corporation and Subsidiaries  
Consolidated Statements of Income  
(Unaudited)**

| (Thousands, except per share amounts)                                 | Third Quarter Ended |                    | Nine Months Ended  |                    |
|---|---------------------|--------------------|--------------------|--------------------|
|   | September 27, 2019  | September 28, 2018 | September 27, 2019 | September 28, 2018 |
| Net sales   | \$ 305,979          | \$ 297,193         | \$ 905,263         | \$ 909,745         |
| Cost of sales   | 241,034             | 232,258            | 701,412            | 724,692            |
| Gross margin  | 64,945              | 64,935             | 203,851            | 185,053            |
| Selling, general, and administrative expense                          | 36,311              | 38,872             | 116,266            | 115,807            |
| Research and development expense                                      | 5,262               | 4,250              | 13,064             | 11,753             |
| Goodwill impairment charges   | 11,560              | —                  | 11,560             | —                  |
| Asset impairment charges  | 2,581               | —                  | 2,581              | —                  |
| Other—net   | 2,942               | 3,147              | 9,954              | 10,384             |
| Operating profit  | 6,289               | 18,666             | 50,426             | 47,109             |
| Interest expense—net  | 436                 | 613                | 1,402              | 2,010              |
| Other non-operating expense—net                                       | 127                 | 800                | 3,484              | 1,679              |
| Income before income taxes  | 5,726               | 17,253             | 45,540             | 43,420             |
| Income tax expense (benefit)  | 2,263               | (2,713)            | 9,631              | 1,746              |
| Net income  | \$ 3,463            | \$ 19,966          | \$ 35,909          | \$ 41,674          |
| <b>Basic earnings per share:</b>                                      |                     |                    |                    |                    |
| Net income per share of common stock                                  | \$ 0.17             | \$ 0.99            | \$ 1.76            | \$ 2.06            |
| <b>Diluted earnings per share:</b>                                    |                     |                    |                    |                    |
| Net income per share of common stock                                  | \$ 0.17             | \$ 0.97            | \$ 1.74            | \$ 2.02            |
| <b>Weighted-average number of shares of common stock outstanding:</b> |                     |                    |                    |                    |
| Basic   | 20,401              | 20,241             | 20,351             | 20,199             |
| Diluted   | 20,677              | 20,648             | 20,645             | 20,607             |

See notes to these consolidated financial statements.

**Materion Corporation and Subsidiaries**  
**Consolidated Statements of Comprehensive Income**  
(Unaudited)

| (Thousands)  | Third Quarter Ended |                   | Nine Months Ended |                   |
|--|---------------------|-------------------|-------------------|-------------------|
|  | Sept. 27,<br>2019   | Sept. 28,<br>2018 | Sept. 27,<br>2019 | Sept. 28,<br>2018 |
| <b>Net income</b>  | <b>\$ 3,463</b>     | <b>\$ 19,966</b>  | <b>\$ 35,909</b>  | <b>\$ 41,674</b>  |
| Other comprehensive income (loss):                         |                     |                   |                   |                   |
| Foreign currency translation adjustment                    | (463)               | 116               | (627)             | 285               |
| Derivative and hedging activity, net of tax                | 82                  | 125               | 9                 | 1,213             |
| Pension and post-employment benefit adjustment, net of tax | 501                 | 1,507             | 14,994            | 4,081             |
| Other comprehensive income                                 | 120                 | 1,748             | 14,376            | 5,579             |
| <b>Comprehensive income</b>                                | <b>\$ 3,583</b>     | <b>\$ 21,714</b>  | <b>\$ 50,285</b>  | <b>\$ 47,253</b>  |

See notes to these consolidated financial statements.

**Materion Corporation and Subsidiaries**  
**Consolidated Balance Sheets**

| (Thousands)  | (Unaudited)       |                  |
|--|-------------------|------------------|
|  | Sept. 27,<br>2019 | Dec. 31,<br>2018 |
| <b>Assets</b>  |                   |                  |
| Current assets   |                   |                  |
| Cash and cash equivalents  | \$ 94,526         | \$ 70,645        |
| Accounts receivable, net   | 165,477           | 130,538          |
| Inventories, net   | 191,956           | 214,871          |
| Prepaid and other current assets   | 23,658            | 23,299           |
| Total current assets   | 475,617           | 439,353          |
| Deferred income taxes  | 1,848             | 5,616            |
| Property, plant, and equipment   | 909,254           | 898,251          |
| Less allowances for depreciation, depletion, and amortization  | (675,039)         | (647,233)        |
| Property, plant, and equipment—net   | 234,215           | 251,018          |
| Operating lease, right-of-use asset  | 25,054            | —                |
| Intangible assets  | 6,692             | 6,461            |
| Other assets   | 17,452            | 7,236            |
| Goodwill   | 78,961            | 90,657           |
| <b>Total Assets</b>  | \$ 839,839        | \$ 800,341       |
| <b>Liabilities and Shareholders' Equity</b>  |                   |                  |
| Current liabilities  |                   |                  |
| Short-term debt  | \$ 857            | \$ 823           |
| Accounts payable   | 43,675            | 49,622           |
| Salaries and wages   | 40,069            | 47,501           |
| Other liabilities and accrued items  | 35,549            | 33,301           |
| Income taxes   | 1,637             | 2,615            |
| Unearned revenue   | 5,188             | 5,918            |
| Total current liabilities  | 126,975           | 139,780          |
| Other long-term liabilities  | 11,021            | 14,764           |
| Operating lease liabilities  | 19,453            | —                |
| Finance lease liabilities  | 17,535            | 15,221           |
| Retirement and post-employment benefits  | 31,026            | 38,853           |
| Unearned income  | 29,270            | 32,563           |
| Long-term income taxes   | 3,121             | 2,993            |
| Deferred income taxes  | 2,175             | 195              |
| Long-term debt   | 1,467             | 2,066            |
| Shareholders' equity   |                   |                  |
| Serial preferred stock (no par value; 5,000 authorized shares, none issued)                                    | —                 | —                |
| Common stock (no par value; 60,000 authorized shares, issued shares of 27,148 at September 27 and December 31) | 247,651           | 234,704          |
| Retained earnings  | 577,409           | 548,374          |
| Common stock in treasury   | (187,464)         | (175,426)        |
| Accumulated other comprehensive loss   | (43,858)          | (58,234)         |
| Other equity   | 4,058             | 4,488            |
| Total shareholders' equity   | 597,796           | 553,906          |
| <b>Total Liabilities and Shareholders' Equity</b>  | \$ 839,839        | \$ 800,341       |

See the notes to these consolidated financial statements.



**Materion Corporation and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
(Unaudited)

| (Thousands)   | Nine Months Ended |                   |
|---|-------------------|-------------------|
|   | Sept. 27,<br>2019 | Sept. 28,<br>2018 |
| Cash flows from operating activities:   |                   |                   |
| Net income  | \$ 35,909         | \$ 41,674         |
| Adjustments to reconcile net income to net cash provided by (used in) operating activities: |                   |                   |
| Depreciation, depletion, and amortization   | 31,955            | 26,506            |
| Amortization of deferred financing costs in interest expense                                | 720               | 720               |
| Stock-based compensation expense (non-cash)   | 5,230             | 3,782             |
| Deferred income tax expense (benefit)   | 5,725             | (5,341)           |
| Impairment charges  | 14,141            | —                 |
| Net pension curtailments and settlements  | 3,296             | 359               |
| Changes in assets and liabilities:  |                   |                   |
| Decrease (increase) in accounts receivable  | (36,146)          | (10,274)          |
| Decrease (increase) in inventory  | 22,089            | 19,754            |
| Decrease (increase) in prepaid and other current assets                                     | (416)             | 4,648             |
| Increase (decrease) in accounts payable and accrued expenses                                | (14,114)          | (10,290)          |
| Increase (decrease) in unearned revenue   | (728)             | 2,365             |
| Increase (decrease) in interest and taxes payable   | (1,499)           | 5,557             |
| Domestic pension plan contributions   | (4,500)           | (38,000)          |
| Other-net   | (2,126)           | 7,783             |
| <b>Net cash provided by operating activities</b>  | <b>59,536</b>     | <b>49,243</b>     |
| Cash flows from investing activities:   |                   |                   |
| Payments for purchase of property, plant, and equipment                                     | (18,193)          | (21,809)          |
| Payments for mine development   | (1,903)           | (5,192)           |
| Proceeds from sale of property, plant, and equipment  | 17                | 26                |
| <b>Net cash used in investing activities</b>  | <b>(20,079)</b>   | <b>(26,975)</b>   |
| Cash flows from financing activities:   |                   |                   |
| Repayment of long-term debt   | (599)             | (513)             |
| Principal payments under finance lease obligations  | (894)             | (573)             |
| Cash dividends paid   | (6,612)           | (6,262)           |
| Repurchase of common stock  | (199)             | —                 |
| Payments of withholding taxes for stock-based compensation awards                           | (4,832)           | (3,006)           |
| Deferred financing costs  | (2,018)           | —                 |
| <b>Net cash used in financing activities</b>  | <b>(15,154)</b>   | <b>(10,354)</b>   |
| Effects of exchange rate changes  | (422)             | (146)             |
| <b>Net change in cash and cash equivalents</b>  | <b>23,881</b>     | <b>11,768</b>     |
| <b>Cash and cash equivalents at beginning of period</b>                                     | <b>70,645</b>     | <b>41,844</b>     |
| <b>Cash and cash equivalents at end of period</b>   | <b>\$ 94,526</b>  | <b>\$ 53,612</b>  |

See notes to these consolidated financial statements.

**Materion Corporation and Subsidiaries**  
**Consolidated Statements of Shareholders' Equity**  
(Unaudited)

| (Thousands, except per share amounts)                             | Common Shares |                                | Shareholders' Equity |                   |                          |   |                 |                   |
|---|---------------|--------------------------------|----------------------|-------------------|--------------------------|---|-----------------|-------------------|
|   | Common Shares | Common Shares Held in Treasury | Common Stock         | Retained Earnings | Common Stock in Treasury | Accumulated Other Comprehensive Income (Loss) | Other Equity    | Total             |
| <b>Balance at June 28, 2019</b>                                   | 20,399        | (6,749)                        | \$ 245,785           | \$ 576,211        | \$ (187,224)             | \$ (43,978)                                   | \$ 3,991        | \$ 594,785        |
| Net income  | —             | —                              | —                    | 3,463             | —                        | —   | —               | 3,463             |
| Other comprehensive income (loss)                                 | —             | —                              | —                    | —                 | —                        | 120   | —               | 120               |
| Cash dividends declared (\$0.11 per share)                        | —             | —                              | —                    | (2,244)           | —                        | —   | —               | (2,244)           |
| Stock-based compensation activity                                 | 5             | 5                              | 1,836                | (21)              | (126)                    | —   | —               | 1,689             |
| Payments of withholding taxes for stock-based compensation awards | (2)           | (2)                            | —                    | —                 | (69)                     | —   | —               | (69)              |
| Directors' deferred compensation                                  | 1             | 1                              | 30                   | —                 | (45)                     | —   | 67              | 52                |
| <b>Balance at September 27, 2019</b>                              | <b>20,403</b> | <b>(6,745)</b>                 | <b>\$ 247,651</b>    | <b>\$ 577,409</b> | <b>\$ (187,464)</b>      | <b>\$ (43,858)</b>                            | <b>\$ 4,058</b> | <b>\$ 597,796</b> |
| <b>Balance at June 29, 2018</b>                                   | 20,236        | (6,912)                        | \$ 230,763           | \$ 553,523        | \$ (173,825)             | \$ (99,106)                                   | \$ 4,386        | \$ 515,741        |
| Net income  | —             | —                              | —                    | 19,966            | —                        | —   | —               | 19,966            |
| Other comprehensive income (loss)                                 | —             | —                              | —                    | —                 | —                        | 1,389   | —               | 1,389             |
| Net pension curtailments and settlements                          | —             | —                              | —                    | —                 | —                        | 359   | —               | 359               |
| Cash dividends declared (\$0.105 per share)                       | —             | —                              | —                    | (2,125)           | —                        | —   | —               | (2,125)           |
| Stock-based compensation activity                                 | 11            | 12                             | 2,074                | (14)              | (442)                    | —   | —               | 1,618             |
| Payments of withholding taxes for stock-based compensation awards | (5)           | (5)                            | —                    | —                 | (241)                    | —   | —               | (241)             |
| Directors' deferred compensation                                  | 2             | 1                              | 9                    | —                 | (24)                     | —   | 51              | 36                |
| <b>Balance at September 28, 2018</b>                              | <b>20,244</b> | <b>(6,904)</b>                 | <b>\$ 232,846</b>    | <b>\$ 571,350</b> | <b>\$ (174,532)</b>      | <b>\$ (97,358)</b>                            | <b>\$ 4,437</b> | <b>\$ 536,743</b> |

| (Thousands, except per share amounts)                             | Common Shares |                                | Shareholders' Equity |                   |                          |   |                 |                   |
|---|---------------|--------------------------------|----------------------|-------------------|--------------------------|---|-----------------|-------------------|
|   | Common Shares | Common Shares Held in Treasury | Common Stock         | Retained Earnings | Common Stock in Treasury | Accumulated Other Comprehensive Income (Loss) | Other Equity    | Total             |
| <b>Balance at December 31, 2018</b>                               | 20,242        | (6,906)                        | \$ 234,704           | \$ 548,374        | \$ (175,426)             | \$ (58,234)                                   | \$ 4,488        | \$ 553,906        |
| Net income  | —             | —                              | —                    | 35,909            | —                        | —   | —               | 35,909            |
| Other comprehensive income (loss)                                 | —             | —                              | —                    | —                 | —                        | 11,080  | —               | 11,080            |
| Net pension curtailments and settlements                          | —             | —                              | —                    | —                 | —                        | 3,296   | —               | 3,296             |
| Cumulative effect of accounting change                            | —             | —                              | —                    | (179)             | —                        | —   | —               | (179)             |
| Cash dividends declared (\$0.325 per share)                       | —             | —                              | —                    | (6,612)           | —                        | —   | —               | (6,612)           |
| Stock-based compensation activity                                 | 252           | 252                            | 12,882               | (83)              | (7,569)                  | —   | —               | 5,230             |
| Payments of withholding taxes for stock-based compensation awards | (89)          | (89)                           | —                    | —                 | (4,832)                  | —   | —               | (4,832)           |
| Repurchase of shares  | (5)           | (5)                            | —                    | —                 | (199)                    | —   | —               | (199)             |
| Directors' deferred compensation                                  | 3             | 3                              | 65                   | —                 | 562                      | —   | (430)           | 197               |
| <b>Balance at September 27, 2019</b>                              | <u>20,403</u> | <u>(6,745)</u>                 | <u>\$ 247,651</u>    | <u>\$ 577,409</u> | <u>\$ (187,464)</u>      | <u>\$ (43,858)</u>                            | <u>\$ 4,058</u> | <u>\$ 597,796</u> |
| <b>Balance at December 31, 2017</b>                               | 20,107        | (7,042)                        | \$ 223,484           | \$ 536,116        | \$ (166,128)             | \$ (102,937)                                  | \$ 4,446        | \$ 494,981        |
| Net income  | —             | —                              | —                    | 41,674            | —                        | —   | —               | 41,674            |
| Other comprehensive income (loss)                                 | —             | —                              | —                    | —                 | —                        | 4,645   | —               | 4,645             |
| Net pension curtailments and settlements                          | —             | —                              | —                    | —                 | —                        | 359   | —               | 359               |
| Tax Cuts and Jobs Act Reclassification                            | —             | —                              | —                    | (575)             | —                        | 575   | —               | —                 |
| Cumulative effect of accounting change                            | —             | —                              | —                    | 425               | —                        | —   | —               | 425               |
| Cash dividends declared (\$0.31 per share)                        | —             | —                              | —                    | (6,262)           | —                        | —   | —               | (6,262)           |
| Stock-based compensation activity                                 | 192           | 193                            | 9,294                | (28)              | (5,484)                  | —   | —               | 3,782             |
| Payments of withholding taxes for stock-based compensation awards | (58)          | (58)                           | —                    | —                 | (3,006)                  | —   | —               | (3,006)           |
| Directors' deferred compensation                                  | 3             | 3                              | 68                   | —                 | 86                       | —   | (9)             | 145               |
| <b>Balance at September 28, 2018</b>                              | <u>20,244</u> | <u>(6,904)</u>                 | <u>\$ 232,846</u>    | <u>\$ 571,350</u> | <u>\$ (174,532)</u>      | <u>\$ (97,358)</u>                            | <u>\$ 4,437</u> | <u>\$ 536,743</u> |

See notes to these consolidated financial statements.



**Materion Corporation and Subsidiaries**  
**Notes to Consolidated Financial Statements**  
**(Unaudited)**

**Note A — Accounting Policies**

**Basis of Presentation:** In management’s opinion, the accompanying consolidated financial statements of Materion Corporation and its subsidiaries (referred to herein as the Company, our, we, or us) contain all of the adjustments necessary to present fairly the financial position, results of operations, and cash flows for the interim periods reported. All adjustments were of a normal and recurring nature. Certain amounts in prior periods have been reclassified to conform to the 2019 consolidated financial statement presentation.

These consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in the Company's 2018 Annual Report on Form 10-K. The interim period results are not necessarily indicative of the results to be expected for the full year.

**New Pronouncements Adopted:** In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-02 (Topic 842), *Leases*, which eliminates the off-balance-sheet accounting for leases. This guidance requires lessees to report their operating leases as both an asset and liability on the balance sheet and disclose key information about leasing arrangements. The Company adopted this guidance as of January 1, 2019 using the modified retrospective method and applied it retrospectively through a cumulative-effect adjustment to retained earnings. The Company applied the transitional package of practical expedients allowed by the standard to not reassess the identification, classification, and initial direct costs of leases commencing before this ASU's effective date; however, the Company did not elect the hindsight transitional practical expedient. The Company also applied the practical expedient to not separate lease and non-lease components to new leases as well as existing leases through transition. The Company made an accounting policy election not to apply recognition requirements of the guidance to short-term leases.

Results for reporting periods beginning after January 1, 2019 are presented under Topic 842, while prior period amounts are not adjusted and continue to be reported in accordance with legacy generally accepted accounting principles.

The Company recorded a net reduction to opening retained earnings of \$0.2 million as of January 1, 2019 due to the cumulative impact of adopting Topic 842, with the impact primarily related to derecognition of a built-to-suit lease. Refer to Note J for additional disclosures relating to the Company's leasing arrangements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which intended to simplify the subsequent measurement of goodwill. This ASU eliminates the requirement for an entity to calculate the implied fair value of goodwill in measuring an impairment charge. Instead, an entity will perform its annual, or interim, goodwill impairment testing by comparing the fair value of a reporting unit with its carrying amount and recording an impairment charge for the amount by which the carrying amount exceeds the fair value. The Company adopted this guidance as of January 1, 2019, and the adoption did not have a material effect on the Company's consolidated financial statements. Refer to Note F for additional disclosures related to goodwill.

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*, which amends and simplifies existing guidance to allow companies to more accurately present the economic effects of risk management activities in the financial statements. The Company adopted this guidance as of January 1, 2019, and the adoption did not have a material effect on the Company's consolidated financial statements.

**New Pronouncements Issued:** In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses*. This ASU requires an entity to change its accounting approach in determining impairment of certain financial instruments, including trade receivables, from an “incurred loss” to a “current expected credit loss” model. The standard will be effective for fiscal years beginning after December 15, 2019, including interim periods within such fiscal years. Early adoption is permitted. The Company is currently assessing the effect that this ASU will have on its financial position, results of operations, and disclosures.

No other recently issued or effective ASUs had, or are expected to have, a material effect on the Company's results of operations, financial condition, or liquidity.

## Note B — Segment Reporting

The Company has the following reportable segments: Performance Alloys and Composites, Advanced Materials, Precision Coatings, and Other. The Company's reportable segments represent components of the Company for which separate financial information is available that is utilized on a regular basis by the Chief Executive Officer, the Company's Chief Operating Decision Maker, in determining how to allocate the Company's resources and evaluate performance.

Performance Alloys and Composites produces strip and bulk form alloy products, strip metal products with clad inlay and overlay metals, beryllium-based metals, beryllium, and aluminum metal matrix composites, in rod, sheet, foil, and a variety of customized forms, beryllia ceramics, and bulk metallic glass materials.

Advanced Materials produces advanced chemicals, microelectric packaging, precious metal, non-precious metal, and specialty metal products, including vapor deposition targets, frame lid assemblies, clad and precious metal preforms, high temperature braze materials, and ultra-fine wire.

Precision Coatings produces thin film coatings, optical filter materials, sputter-coated, and precision-converted thin film materials.

The Other reportable segment includes unallocated corporate costs and assets.

| (Thousands)                   | Performance<br>Alloys and<br>Composites | Advanced<br>Materials | Precision Coatings | Other    | Total      |
|-------------------------------|---|-----------------------|--------------------|----------|------------|
| <b>Third Quarter 2019</b>     |   |                       |                    |          |            |
| Net sales                     | \$ 130,704                              | \$ 147,650            | \$ 27,625          | \$ —     | \$ 305,979 |
| Intersegment sales            | —                                       | 17,161                | —                  | —        | 17,161     |
| Operating profit (loss)       | 18,780                                  | 6,202                 | (11,198)           | (7,495)  | 6,289      |
| <b>Third Quarter 2018</b>     |   |                       |                    |          |            |
| Net sales                     | \$ 124,103                              | \$ 144,072            | \$ 29,018          | \$ —     | \$ 297,193 |
| Intersegment sales            | 2                                       | 13,265                | —                  | —        | 13,267     |
| Operating profit (loss)       | 16,728                                  | 6,882                 | 3,499              | (8,443)  | 18,666     |
| <b>First Nine Months 2019</b> |   |                       |                    |          |            |
| Net sales                     | \$ 393,048                              | \$ 424,913            | \$ 87,302          | \$ —     | \$ 905,263 |
| Intersegment sales            | 15                                      | 53,634                | —                  | —        | 53,649     |
| Operating profit (loss)       | 57,066                                  | 19,421                | (5,184)            | (20,877) | 50,426     |
| <b>First Nine Months 2018</b> |   |                       |                    |          |            |
| Net sales                     | \$ 372,104                              | \$ 447,941            | \$ 89,700          | \$ —     | \$ 909,745 |
| Intersegment sales            | 33                                      | 36,317                | —                  | —        | 36,350     |
| Operating profit (loss)       | 38,898                                  | 18,352                | 9,107              | (19,248) | 47,109     |

The following table disaggregates revenue for each segment by end market for the third quarter and first nine months of 2019 and 2018, respectively:

| (Thousands)               | Performance Alloys and Composites | Advanced Materials | Precision Coatings | Other       | Total             |
|---------------------------|-----------------------------------|--------------------|--------------------|-------------|-------------------|
| <b>Third Quarter 2019</b> |                                   |                    |                    |             |                   |
| <b>End Market</b>         |                                   |                    |                    |             |                   |
| Semiconductor             | \$ 1,220                          | \$ 107,883         | \$ —               | \$ —        | \$ 109,103        |
| Industrial                | 28,353                            | 8,302              | 3,365              | —           | 40,020            |
| Aerospace and Defense     | 27,653                            | 1,779              | 5,303              | —           | 34,735            |
| Consumer Electronics      | 18,399                            | 395                | 5,613              | —           | 24,407            |
| Automotive                | 16,071                            | 3,012              | 296                | —           | 19,379            |
| Energy                    | 10,629                            | 20,911             | —                  | —           | 31,540            |
| Telecom and Data Center   | 14,964                            | 835                | —                  | —           | 15,799            |
| Other                     | 13,415                            | 4,533              | 13,048             | —           | 30,996            |
| Total                     | <u>\$ 130,704</u>                 | <u>\$ 147,650</u>  | <u>\$ 27,625</u>   | <u>\$ —</u> | <u>\$ 305,979</u> |
| <b>Third Quarter 2018</b> |                                   |                    |                    |             |                   |
| <b>End Market</b>         |                                   |                    |                    |             |                   |
| Semiconductor             | \$ 1,381                          | \$ 104,806         | \$ 269             | \$ —        | \$ 106,456        |
| Industrial                | 26,812                            | 9,269              | 3,338              | —           | 39,419            |
| Aerospace and Defense     | 19,840                            | 910                | 5,203              | —           | 25,953            |
| Consumer Electronics      | 14,964                            | 149                | 4,730              | —           | 19,843            |
| Automotive                | 25,292                            | 1,707              | 398                | —           | 27,397            |
| Energy                    | 12,395                            | 19,338             | —                  | —           | 31,733            |
| Telecom and Data Center   | 17,530                            | 951                | —                  | —           | 18,481            |
| Other                     | 5,889                             | 6,942              | 15,080             | —           | 27,911            |
| Total                     | <u>\$ 124,103</u>                 | <u>\$ 144,072</u>  | <u>\$ 29,018</u>   | <u>\$ —</u> | <u>\$ 297,193</u> |

| (Thousands)                   | Performance Alloys and Composites | Advanced Materials | Precision Coatings | Other | Total      |
|-------------------------------|-----------------------------------|--------------------|--------------------|-------|------------|
| <b>First Nine Months 2019</b> |                                   |                    |                    |       |            |
| <b>End Market</b>             |                                   |                    |                    |       |            |
| Semiconductor                 | \$ 4,489                          | \$ 314,607         | \$ 205             | \$ —  | \$ 319,301 |
| Industrial                    | 83,368                            | 23,934             | 11,358             | —     | 118,660    |
| Aerospace and Defense         | 80,774                            | 4,397              | 14,924             | —     | 100,095    |
| Consumer Electronics          | 54,617                            | 1,100              | 13,530             | —     | 69,247     |
| Automotive                    | 53,348                            | 6,035              | 882                | —     | 60,265     |
| Energy                        | 33,026                            | 59,136             | —                  | —     | 92,162     |
| Telecom and Data Center       | 50,800                            | 1,749              | —                  | —     | 52,549     |
| Other                         | 32,626                            | 13,955             | 46,403             | —     | 92,984     |
| Total                         | \$ 393,048                        | \$ 424,913         | \$ 87,302          | \$ —  | \$ 905,263 |

|                               |            |            |           |      |            |
|-------------------------------|------------|------------|-----------|------|------------|
| <b>First Nine Months 2018</b> |            |            |           |      |            |
| <b>End Market</b>             |            |            |           |      |            |
| Semiconductor                 | \$ 3,768   | \$ 333,797 | \$ 1,240  | \$ — | \$ 338,805 |
| Industrial                    | 85,389     | 25,002     | 9,237     | —    | 119,628    |
| Aerospace and Defense         | 64,086     | 2,912      | 14,847    | —    | 81,845     |
| Consumer Electronics          | 46,419     | 775        | 14,021    | —    | 61,215     |
| Automotive                    | 72,065     | 5,890      | 1,089     | —    | 79,044     |
| Energy                        | 30,007     | 53,045     | —         | —    | 83,052     |
| Telecom and Data Center       | 50,177     | 1,982      | —         | —    | 52,159     |
| Other                         | 20,193     | 24,538     | 49,266    | —    | 93,997     |
| Total                         | \$ 372,104 | \$ 447,941 | \$ 89,700 | \$ — | \$ 909,745 |

Intersegment sales are eliminated in consolidation.

#### Note C — Revenue Recognition

Net sales consist primarily of revenue from the sale of precious and non-precious specialty metals, beryllium and copper-based alloys, beryllium composites, and other products into numerous end markets. The Company requires an agreement with a customer that creates enforceable rights and performance obligations. The Company generally recognizes revenue, in an amount that reflects the consideration to which it expects to be entitled, upon satisfaction of a performance obligation, by transferring control over a product to the customer. Control over the product is generally transferred to the customer when the Company has a present right to payment, the customer has legal title, the customer has physical possession, the customer has the significant risks and rewards of ownership, and/or the customer has accepted the product.

**Transaction Price Allocated to Future Performance Obligations:** Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers*, requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied at September 27, 2019. Remaining performance obligations include non-cancelable purchase orders and customer contracts. The guidance provides certain practical expedients that limit this requirement. As such, the Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected length of one year or less.

After considering the practical expedient at September 27, 2019, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately \$21.6 million.

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**Contract Balances:** The timing of revenue recognition, billings, and cash collections resulted in the following contract assets and contract liabilities:

| (Thousands)                | September 27, 2019 | December 31, 2018 | \$ change | % change |
|----------------------------|--------------------|-------------------|-----------|----------|
| Accounts receivable, trade | \$ 149,957         | \$ 124,498        | \$ 25,459 | 20 %     |
| Unbilled receivables       | 16,206             | 4,619             | 11,587    | 251 %    |
| Unearned revenue           | 5,188              | 5,918             | (730)     | (12)%    |

Accounts receivable, trade represents payments due from customers relating to the transfer of the Company's products and services. The Company believes that its receivables are collectible and appropriate allowances for doubtful accounts have been recorded. Impairment losses (bad debt) incurred relating to our receivables were immaterial during the third quarter and first nine months of 2019.

Unbilled receivables represent expenditures on contracts, plus applicable profit margin, not yet billed. Unbilled receivables are normally billed and collected within one year. Billings made on contracts are recorded as a reduction of unbilled receivables.

Unearned revenue is recorded for consideration received from customers in advance of satisfaction of the related performance obligations. The Company recognized approximately \$5.0 million of the unearned amounts as revenue during the first nine months of 2019.

As a practical expedient, the Company does not adjust the promised amount of consideration for the effects of a significant financing component because the period between the transfer of a product or service to a customer and when the customer pays for that product or service will be one year or less. The Company does not include extended payment terms in its contracts with customers.

**Note D — Other-net**

Other-net expense for the third quarter and first nine months of 2019 and 2018 is summarized as follows:

| (Thousands)                          | Third Quarter Ended |                   | Nine Months Ended |                   |
|--------------------------------------|---------------------|-------------------|-------------------|-------------------|
|                                      | Sept. 27,<br>2019   | Sept. 28,<br>2018 | Sept. 27,<br>2019 | Sept. 28,<br>2018 |
| Metal consignment fees               | \$ 1,936            | \$ 2,503          | \$ 7,252          | \$ 7,520          |
| Amortization of intangible assets    | 375                 | 524               | 1,133             | 1,858             |
| Foreign currency loss                | 469                 | 140               | 853               | 1,359             |
| Net loss on disposal of fixed assets | 1                   | 14                | 143               | 37                |
| Rental income                        | (29)                | (119)             | (87)              | (378)             |
| Other items                          | 190                 | 85                | 660               | (12)              |
| <b>Total</b>                         | <b>\$ 2,942</b>     | <b>\$ 3,147</b>   | <b>\$ 9,954</b>   | <b>\$ 10,384</b>  |

**Note E — Restructuring**

In the third quarter of 2019, the Company initiated a restructuring plan in the Large Area Coatings (LAC) business (a reporting unit in the Precision Coatings segment) to reduce headcount, idle certain machinery and equipment, and exit a facility in Windsor, Connecticut. Costs associated with this plan also included severance and related costs for approximately 19 employees.

In addition, in the third quarter of 2019, the Company completed other cost reduction actions in order to align costs with commensurate business levels. These actions were accomplished through elimination of vacant positions, consolidation of roles,

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and staff reduction. Costs associated with these actions within the Other segment included severance associated with approximately seven employees and other related costs.

These costs are presented in the Consolidated Statements of Income as follows:

| (Thousands)   | Third Quarter Ended |                | Nine Months Ended |                |
|---|---------------------|----------------|-------------------|----------------|
|   | Sept. 27, 2019      | Sept. 28, 2018 | Sept. 27, 2019    | Sept. 28, 2018 |
| Cost of sales                                       | \$ 286              | \$ —           | \$ 286            | \$ —           |
| Selling, general, and administrative (SG&A) expense | 499                 | —              | 499               | —              |
| Total   | <u>\$ 785</u>       | <u>\$ —</u>    | <u>\$ 785</u>     | <u>\$ —</u>    |

Remaining severance payments related to these initiatives of \$0.6 million are reflected within Other liabilities and accrued items in the Consolidated Balance Sheets. The Company does not expect to incur additional costs related to these initiatives.

**Note F — Goodwill**

A summary of changes in goodwill by reportable segment is as follows:

| (Thousands)                   | Performance Alloys<br>and Composites | Advanced Materials | Precision Coatings | Total     |
|-------------------------------|--------------------------------------|--------------------|--------------------|-----------|
| Balance at December 31, 2018  | \$ 1,899                             | \$ 50,276          | \$ 38,482          | \$ 90,657 |
| Impairment charge             | —                                    | —                  | (11,560)           | (11,560)  |
| Other                         | —                                    | (136)              | —                  | (136)     |
| Balance at September 27, 2019 | \$ 1,899                             | \$ 50,140          | \$ 26,922          | \$ 78,961 |

Goodwill is reviewed annually for impairment or more frequently if impairment indicators arise. The Company conducts its annual goodwill impairment assessment as of the first day of the fourth quarter, or more frequently under certain circumstances. Goodwill is assigned to the reporting unit, which is the operating segment level or one level below the operating segment.

During the third quarter of 2019, the LAC reporting unit began to experience a decline in sales volume from a significant customer. Based on an assessment that the decline in sales volume was expected to continue, the Company initiated a restructuring plan at the end of September to reduce LAC's cost structure. Refer to Note E for further details of the restructuring plan. The Company considered these factors to be impairment indicators. As a result, the Company performed an interim impairment analysis as of September 27, 2019 related to the LAC reporting unit. The Company first reviewed long-lived assets which resulted in an impairment charge of \$2.6 million. The Company then performed a goodwill impairment analysis which resulted in an \$11.6 million charge. The Company estimated fair value using a discounted cash flow analysis for goodwill and estimated market values for other assets. These non-cash charges relating to goodwill and other assets were recorded in Goodwill impairment charges and Asset impairment charges, respectively, in the Consolidated Statements of Income.

**Note G — Income Taxes**

The Company's effective tax rate for the third quarter of 2019 and 2018 was 39.5% and (15.7)%, respectively, and 21.1% and 4.0% for the first nine months of 2019 and 2018, respectively.

The effective tax rate for the third quarter and first nine months of 2019 differed from the statutory tax rate primarily due to discrete income tax expense of \$1.8 million and \$1.3 million recorded in the third quarter and first nine months of 2019, respectively. The discrete income tax expense recorded in the third quarter of 2019 consisted of \$0.8 million of expense related to an impairment of goodwill and a \$1.0 million 2018 U.S. Federal income tax return to provision tax expense adjustment.

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The effective tax rate for the third quarter and first nine months of 2018 differed from the statutory tax rate primarily due to discrete income tax benefits of \$6.1 million and \$7.1 million recorded in the third quarter and first nine months of 2018, respectively. The discrete income tax benefits were comprised primarily of \$10.4 million related to Staff Accounting Bulletin (SAB) No. 118 adjustments, partially offset by \$2.2 million of expense for a valuation allowance related to deferred tax assets that were not likely to be realized for one of the Company's controlled foreign corporations, and a \$1.5 million 2017 U.S. Federal income tax return to provision tax expense adjustment.

**Note H — Earnings Per Share (EPS)**

The following table sets forth the computation of basic and diluted EPS:

|  | Third Quarter Ended |                   | Nine Months Ended |                   |
|--|---------------------|-------------------|-------------------|-------------------|
|  | Sept. 27,<br>2019   | Sept. 28,<br>2018 | Sept. 27,<br>2019 | Sept. 28,<br>2018 |
| <b>(Thousands, except per share amounts)</b> |                     |                   |                   |                   |
| Numerator for basic and diluted EPS:         |                     |                   |                   |                   |
| Net income                                   | \$ 3,463            | \$ 19,966         | \$ 35,909         | \$ 41,674         |
| Denominator:                                 |                     |                   |                   |                   |
| Denominator for basic EPS:                   |                     |                   |                   |                   |
| Weighted-average shares outstanding          | 20,401              | 20,241            | 20,351            | 20,199            |
| Effect of dilutive securities:               |                     |                   |                   |                   |
| Stock appreciation rights                    | 59                  | 168               | 80                | 183               |
| Restricted stock units                       | 75                  | 86                | 73                | 84                |
| Performance-based restricted stock units     | 142                 | 153               | 141               | 141               |
| Diluted potential common shares              | 276                 | 407               | 294               | 408               |
| Denominator for diluted EPS:                 |                     |                   |                   |                   |
| Adjusted weighted-average shares outstanding | 20,677              | 20,648            | 20,645            | 20,607            |
| Basic EPS                                    | \$ 0.17             | \$ 0.99           | \$ 1.76           | \$ 2.06           |
| Diluted EPS                                  | \$ 0.17             | \$ 0.97           | \$ 1.74           | \$ 2.02           |

Securities totaling 70,562 and 65,112 for the quarters ended September 27, 2019 and September 28, 2018, respectively, and 127,759 and 65,112 for the nine months ended September 27, 2019 and September 28, 2018, respectively, were excluded from the dilution calculation as the effect would have been anti-dilutive.

**Note I — Inventories**

Inventories on the Consolidated Balance Sheets are summarized as follows:

|                            | Sept. 27,<br>2019  | December 31,<br>2018 |
|----------------------------|--------------------|----------------------|
|                            | <b>(Thousands)</b> |                      |
| Raw materials and supplies | \$ 36,399          | \$ 33,182            |
| Work in process            | 182,015            | 195,879              |
| Finished goods             | 22,516             | 30,643               |
| Subtotal                   | \$ 240,930         | \$ 259,704           |
| Less: LIFO reserve balance | 48,974             | 44,833               |
| Inventories                | <u>\$ 191,956</u>  | <u>\$ 214,871</u>    |

The liquidation of last in, first out (LIFO) inventory layers decreased cost of sales by \$0.5 million and \$0.4 million in the third quarter and first nine months of 2019, respectively, compared to an increase to cost of sales of \$0.2 million and \$0.3 million in the third quarter and first nine months of 2018, respectively.

The Company maintains the majority of the precious metals and copper used in production on a consignment basis in order to reduce our exposure to metal price movements and to reduce our working capital investment. The notional value of off-balance sheet precious metals and copper was \$302.9 million as of September 27, 2019 versus \$316.1 million as of December 31, 2018.

**Note J — Leases**

The Company leases warehouse and manufacturing real estate, and manufacturing and computer equipment under operating leases with lease terms ranging up to 25 years. Several operating lease agreements contain options to extend the lease term and/or options for early termination. The lease term consists of the non-cancelable period of the lease, periods covered by options to extend the lease if the Company is reasonably certain to exercise the option, and periods covered by an option to terminate the lease if the Company is reasonably certain not to exercise the option. The weighted average remaining lease term for the Company's operating and finance leases as of September 27, 2019 was 4.83 years and 19.52 years, respectively.

The discount rate implicit within the leases is generally not determinable, and, therefore, the Company determines the discount rate based on its incremental

borrowing rate. The incremental borrowing rate for leases is determined based on the lease term in which lease payments are made, adjusted for impacts of collateral. The weighted average discount rate used to measure the Company's operating and finance lease liabilities as of September 27, 2019 was 5.57% and 5.31%, respectively.

The components of operating and finance lease cost for the third quarter and first nine months of 2019 were as follows:

| (Thousands)<br><b>Components of lease expense</b> | <b>Third Quarter</b> | <b>Nine Months</b> |
|---|----------------------|--------------------|
|   | <b>Ended</b>         | <b>Ended</b>       |
|   | <b>Sept. 27,</b>     | <b>Sept. 27,</b>   |
|   | <b>2019</b>          | <b>2019</b>        |
| Operating lease cost                              | \$ 2,449             | \$ 7,452           |
| Finance lease cost                                |                      |                    |
| Amortization of right-of-use assets               | 353                  | 1,063              |
| Interest on lease liabilities                     | 256                  | 778                |
| Total lease cost                                  | <u>\$ 3,058</u>      | <u>\$ 9,293</u>    |

Operating lease expense amounted to \$2.4 million and \$2.8 million during the third quarter of 2019 and 2018, respectively, and \$7.5 million and \$8.9 million during the first nine months of 2019 and 2018, respectively. The Company straight-lines its expense of fixed payments for operating leases over the lease term and expenses the variable lease payments in the period incurred. These variable lease payments are not included in the calculation of right-of-use assets or lease liabilities.



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Supplemental balance sheet information related to the Company's operating and finance leases as of September 27, 2019 was as follows:

| (Thousands)  | <u>Sept. 27,</u><br><u>2019</u> |
|--|---------------------------------|
| <b>Supplemental balance sheet information</b>            |                                 |
| <b>Operating Leases</b>                                  |                                 |
| Operating lease right-of-use assets                      | \$ 25,054                       |
| Other liabilities and accrued items                      | 6,908                           |
| Operating lease liabilities                              | 19,453                          |
| <b>Finance Leases</b>                                    |                                 |
| Property, plant, and equipment                           | \$ 25,830                       |
| Allowances for depreciation, depletion, and amortization | (3,331)                         |
| Finance lease assets, net                                | \$ 22,499                       |
| Other liabilities and accrued items                      | \$ 1,243                        |
| Finance lease liabilities                                | 17,535                          |
| Total principal payable on finance leases                | \$ 18,778                       |

Future maturities of the Company's lease liabilities as of September 27, 2019 are as follows:

| (Thousands)  | <u>Finance</u><br><u>Leases</u> | <u>Operating</u><br><u>Leases</u> |
|--|---------------------------------|-----------------------------------|
| 2019   | \$ 552                          | \$ 2,129                          |
| 2020   | 2,208                           | 7,726                             |
| 2021   | 2,208                           | 6,661                             |
| 2022   | 2,208                           | 4,715                             |
| 2023   | 1,498                           | 3,785                             |
| 2024 and thereafter                                | 21,729                          | 5,210                             |
| Total lease payments                               | 30,403                          | 30,226                            |
| Less amount of lease payment representing interest | 11,625                          | 3,865                             |
| Total present value of lease payments              | \$ 18,778                       | \$ 26,361                         |

Supplemental cash flow information related to leases for the first nine months of 2019 was as follows:

| (Thousands)   | <u>Nine Months Ended</u><br><u>Sept. 27,</u><br><u>2019</u> |
|---|---|
| <b>Supplemental cash flow information</b>                               |   |
| Cash paid for amounts included in the measurement of lease liabilities: |   |
| Operating cash flows from operating leases                              | \$ 11,763   |
| Operating cash flows from finance leases                                | 778   |
| Financing cash flows from finance leases                                | 894   |



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**Note K — Pensions and Other Post-employment Benefits**

The following is a summary of the net periodic benefit cost for the third quarter and first nine months of 2019 and 2018 for the domestic pension plans (which include the defined benefit pension plan and the supplemental retirement plans) and the domestic retiree medical plan.

| (Thousands)  | Pension Benefits    |                   | Other Benefits      |                   |
|--|---------------------|-------------------|---------------------|-------------------|
|  | Third Quarter Ended |                   | Third Quarter Ended |                   |
|  | Sept. 27,<br>2019   | Sept. 28,<br>2018 | Sept. 27,<br>2019   | Sept. 28,<br>2018 |
| <b>Components of net periodic benefit cost (benefit)</b> |                     |                   |                     |                   |
| Service cost   | \$ 1,359            | \$ 1,674          | \$ 18               | \$ 27             |
| Interest cost  | 1,500               | 2,397             | 100                 | 99                |
| Expected return on plan assets                           | (2,134)             | (3,697)           | —                   | —                 |
| Amortization of prior service benefit                    | 120                 | (31)              | (374)               | (374)             |
| Amortization of net loss (gain)                          | 762                 | 1,959             | (24)                | —                 |
| Net periodic benefit cost (benefit)                      | \$ 1,607            | \$ 2,302          | \$ (280)            | \$ (248)          |
| Net curtailments/settlements                             | —                   | 359               | —                   | —                 |
| Total net benefit cost (benefit)                         | \$ 1,607            | \$ 2,661          | \$ (280)            | \$ (248)          |

| (Thousands)  | Pension Benefits  |                   | Other Benefits    |                   |
|--|-------------------|-------------------|-------------------|-------------------|
|  | Nine Months Ended |                   | Nine Months Ended |                   |
|  | Sept. 27,<br>2019 | Sept. 28,<br>2018 | Sept. 27,<br>2019 | Sept. 28,<br>2018 |
| <b>Components of net periodic benefit cost (benefit)</b> |                   |                   |                   |                   |
| Service cost   | \$ 4,117          | \$ 5,022          | \$ 53             | \$ 83             |
| Interest cost  | 4,404             | 7,191             | 299               | 297               |
| Expected return on plan assets                           | (6,424)           | (11,091)          | —                 | —                 |
| Amortization of prior service benefit                    | 362               | (92)              | (1,123)           | (1,123)           |
| Amortization of net loss (gain)                          | 2,193             | 5,878             | (70)              | —                 |
| Net periodic benefit cost (benefit)                      | \$ 4,652          | \$ 6,908          | \$ (841)          | \$ (743)          |
| Net curtailments/settlements                             | 3,296             | 359               | —                 | —                 |
| Total net benefit cost (benefit)                         | \$ 7,948          | \$ 7,267          | \$ (841)          | \$ (743)          |

The Company made contributions to the domestic defined benefit pension plan of \$4.5 million and \$38.0 million in the first nine months of 2019 and 2018, respectively.

The Company reports the service cost component of net periodic benefit cost in the same line item as other compensation costs in operating expenses and the non-service cost components of net periodic benefit cost in Other non-operating expenses.

In May 2019, the Company's Board of Directors approved changes to the U.S. defined benefit pension plan. The Company will freeze the pay and service amounts used to calculate pension benefits for active participants in the pension plan as of January 1, 2020. The Company recognized a non-cash pre-tax pension curtailment charge of \$3.3 million associated with the plan amendment during the first nine months of 2019.

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**Note L — Accumulated Other Comprehensive Income (Loss)**

Changes in the components of accumulated other comprehensive income, including the amounts reclassified, for the third quarter and first nine months of 2019 and 2018 are as follows:

| (Thousands)  | Gains and Losses on Cash Flow Hedges |                    |               |                 | Pension and<br>Post-<br>Employment<br>Benefits | Foreign<br>Currency<br>Translation | Total              |
|--|--------------------------------------|--------------------|---------------|-----------------|--|------------------------------------|--------------------|
|  | Foreign<br>Currency                  | Precious<br>Metals | Copper        | Total           |  |                                    |                    |
| Balance at June 28, 2019   | \$ 1,420                             | \$ (458)           | \$ (134)      | \$ 828          | \$ (40,050)                                    | \$ (4,756)                         | \$ (43,978)        |
| Other comprehensive income before reclassifications              | 354                                  | (730)              | (271)         | (647)           | —  | (463)                              | (1,110)            |
| Amounts reclassified from accumulated other comprehensive income | (3)                                  | 343                | 413           | 753             | 609  | —                                  | 1,362              |
| Net current period other comprehensive income (loss) before tax  | 351                                  | (387)              | 142           | 106             | 609  | (463)                              | 252                |
| Deferred taxes   | 80                                   | (66)               | 10            | 24              | 108  | —                                  | 132                |
| Net current period other comprehensive income (loss) after tax   | 271                                  | (321)              | 132           | 82              | 501  | (463)                              | 120                |
| Balance at September 27, 2019                                    | <u>\$ 1,691</u>                      | <u>\$ (779)</u>    | <u>\$ (2)</u> | <u>\$ 910</u>   | <u>\$ (39,549)</u>                             | <u>\$ (5,219)</u>                  | <u>\$ (43,858)</u> |
| Balance at June 29, 2018   | \$ 1,582                             | \$ 269             | \$ —          | \$ 1,851        | \$ (97,018)                                    | \$ (3,939)                         | \$ (99,106)        |
| Other comprehensive income (loss) before reclassifications       | 121                                  | 330                | —             | 451             | —  | 116                                | 567                |
| Amounts reclassified from accumulated other comprehensive income | (169)                                | (119)              | —             | (288)           | 1,935  | —                                  | 1,647              |
| Net current period other comprehensive income (loss) before tax  | (48)                                 | 211                | —             | 163             | 1,935  | 116                                | 2,214              |
| Deferred taxes   | (11)                                 | 49                 | —             | 38              | 428  | —                                  | 466                |
| Net current period other comprehensive income (loss) after tax   | (37)                                 | 162                | —             | 125             | 1,507  | 116                                | 1,748              |
| Balance at September 28, 2018                                    | <u>\$ 1,545</u>                      | <u>\$ 431</u>      | <u>\$ —</u>   | <u>\$ 1,976</u> | <u>\$ (95,511)</u>                             | <u>\$ (3,823)</u>                  | <u>\$ (97,358)</u> |

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| (Thousands)  | Gains and Losses on Cash Flow Hedges |                    |          |          | Pension and<br>Post-<br>Employment<br>Benefits | Foreign<br>Currency<br>Translation | Total        |
|--|--------------------------------------|--------------------|----------|----------|--|------------------------------------|--------------|
|  | Foreign<br>Currency                  | Precious<br>Metals | Copper   | Total    |  |                                    |              |
| Balance at December 31, 2018                                     | \$ 1,263                             | \$ 79              | \$ (441) | \$ 901   | \$ (54,543)                                    | \$ (4,592)                         | \$ (58,234)  |
| Other comprehensive income before reclassifications              | 602                                  | (1,366)            | 33       | (731)    | 14,224   | (627)                              | 12,866       |
| Amounts reclassified from accumulated other comprehensive income | (47)                                 | 281                | 505      | 739      | 5,050  | —                                  | 5,789        |
| Net current period other comprehensive income (loss) before tax  | 555                                  | (1,085)            | 538      | 8        | 19,274   | (627)                              | 18,655       |
| Deferred taxes   | 127                                  | (227)              | 99       | (1)      | 4,280  | —                                  | 4,279        |
| Net current period other comprehensive income (loss) after tax   | 428                                  | (858)              | 439      | 9        | 14,994   | (627)                              | 14,376       |
| Balance at September 27, 2019                                    | \$ 1,691                             | \$ (779)           | \$ (2)   | \$ 910   | \$ (39,549)                                    | \$ (5,219)                         | \$ (43,858)  |
| Balance at December 31, 2017                                     | \$ 959                               | \$ (196)           | \$ —     | \$ 763   | \$ (99,592)                                    | \$ (4,108)                         | \$ (102,937) |
| Other comprehensive income (loss) before reclassifications       | (206)                                | 774                | —        | 568      | —  | 285                                | 853          |
| Amounts reclassified from accumulated other comprehensive income | 250                                  | 40                 | —        | 290      | 5,183  | —                                  | 5,473        |
| Net current period other comprehensive income (loss) before tax  | 44                                   | 814                | —        | 858      | 5,183  | 285                                | 6,326        |
| Deferred taxes   | (542)                                | 187                | —        | (355)    | 1,102  | —                                  | 747          |
| Net current period other comprehensive income (loss) after tax   | 586                                  | 627                | —        | 1,213    | 4,081  | 285                                | 5,579        |
| Balance at September 28, 2018                                    | \$ 1,545                             | \$ 431             | \$ —     | \$ 1,976 | \$ (95,511)                                    | \$ (3,823)                         | \$ (97,358)  |

Reclassifications from accumulated other comprehensive income of gains and losses on foreign currency cash flow hedges are recorded in Net sales in the Consolidated Statements of Income. Reclassifications from accumulated other comprehensive income of gains and losses on precious metal cash flow hedges are recorded in Cost of sales in the Consolidated Statements of Income. Refer to Note O for additional details on cash flow hedges.

Reclassifications from accumulated other comprehensive income for pension and post-employment benefits are included in the computation of the net periodic pension and post-employment benefit expense. Refer to Note K for additional details on pension and post-employment expenses.

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**Note M — Stock-based Compensation Expense**

Stock-based compensation expense, which includes awards settled in shares and in cash, was \$2.5 million and \$8.7 million in the third quarter and first nine months of 2019, respectively, compared to \$4.2 million and \$9.4 million in same periods of 2018.

The Company granted 73,461 stock appreciation rights (SARs) to certain employees during the first nine months of 2019. The weighted-average exercise price per share and weighted-average fair value per share of the SARs granted during the nine months ended September 27, 2019 were \$58.30 and \$17.76, respectively. The Company estimated the fair value of the SARs using the following weighted-average assumptions in the Black-Scholes model:

|                          |       |
|--------------------------|-------|
| Risk-free interest rate  | 2.47% |
| Dividend yield           | 0.7%  |
| Volatility               | 31.7% |
| Expected term (in years) | 5.2   |

The Company granted 63,665 stock-settled restricted stock units (RSUs) to certain employees and 11,048 stock-settled RSUs to non-employee directors during the first nine months of 2019. The Company measures the fair value of stock-settled RSUs based on the closing market price of a share of Materion common stock on the date of the grant. The weighted-average fair value per share was \$58.30 and \$68.79 for stock-settled RSUs granted to employees and non-employee directors, respectively, during the nine months ended September 27, 2019. RSUs are expensed over the vesting period of three years for employees and one year for non-employee directors.

The Company granted stock-settled performance-based restricted stock units (PRSUs) to certain employees in the first nine months of 2019. The weighted-average fair value of the stock-settled PRSUs was \$69.84 per share and will be expensed over the vesting period of three years. The final payout to the employees for all PRSUs will be based upon the Company's return on invested capital and the total return to shareholders over the vesting period relative to a peer group's performance over the same period.

At September 27, 2019, unamortized compensation cost related to the unvested portion of all stock-based awards was approximately \$11.2 million, and is expected to be recognized over the remaining vesting period of the respective grants.

**Note N — Fair Value of Financial Instruments**

The Company measures and records financial instruments at fair value. A fair value hierarchy is used for those instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and the Company's assumptions (unobservable inputs). The hierarchy consists of three levels:

Level 1 — Quoted market prices in active markets for identical assets and liabilities;

Level 2 — Inputs other than Level 1 inputs that are either directly or indirectly observable; and

Level 3 — Unobservable inputs developed using estimates and assumptions developed by the Company, which reflect those that a market participant would use.

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The following table summarizes the financial instruments measured at fair value in the Consolidated Balance Sheets as of September 27, 2019 and December 31, 2018:

| (Thousands)                        | Total Carrying Value in the Consolidated Balance Sheets |          | Quoted Prices in Active Markets for Identical Assets (Level 1) |          | Significant Other Observable Inputs (Level 2) |          | Significant Unobservable Inputs (Level 3) |      |
|------------------------------------|---|----------|--|----------|---|----------|---|------|
|                                    | 2019  | 2018     | 2019   | 2018     | 2019  | 2018     | 2019                                      | 2018 |
| <b>Financial Assets</b>            |   |          |  |          |   |          |   |      |
| Deferred compensation investments  | \$ 3,151  | \$ 2,156 | \$ 3,151   | \$ 2,156 | \$ —  | \$ —     | \$ —                                      | \$ — |
| Foreign currency forward contracts | 478   | 246      | —  | —        | 478   | 246      | —   | —    |
| Precious metal swaps               | 18  | 237      | —  | —        | 18  | 237      | —   | —    |
| Copper swaps                       | 10  | —        | —  | —        | 10  | —        | —   | —    |
| Total                              | \$ 3,657  | \$ 2,639 | \$ 3,151   | \$ 2,156 | \$ 506  | \$ 483   | \$ —                                      | \$ — |
| <b>Financial Liabilities</b>       |   |          |  |          |   |          |   |      |
| Deferred compensation liability    | \$ 3,151  | \$ 2,156 | \$ 3,151   | \$ 2,156 | \$ —  | \$ —     | \$ —                                      | \$ — |
| Foreign currency forward contracts | 45  | 432      | —  | —        | 45  | 432      | —   | —    |
| Precious metal swaps               | 1,001   | 135      | —  | —        | 1,001   | 135      | —   | —    |
| Copper swaps                       | 41  | 569      | —  | —        | 41  | 569      | —   | —    |
| Total                              | \$ 4,238  | \$ 3,292 | \$ 3,151   | \$ 2,156 | \$ 1,087                                      | \$ 1,136 | \$ —                                      | \$ — |

The Company uses a market approach to value the assets and liabilities for financial instruments in the table above. Outstanding contracts are valued through models that utilize market observable inputs, including both spot and forward prices, for the same underlying currencies and metals. The carrying values of the other working capital items and debt in the Consolidated Balance Sheets approximate fair values as of September 27, 2019 and December 31, 2018.

**Note O — Derivative Instruments and Hedging Activity**

The Company uses derivative contracts to hedge portions of its foreign currency exposures and uses derivatives to hedge a portion of its precious metal and copper exposures. The objectives and strategies for using derivatives in these areas are as follows:

**Foreign Currency.** The Company sells a portion of its products to overseas customers in their local currencies, primarily the euro and yen. The Company secures foreign currency derivatives, mainly forward contracts and options, to hedge these anticipated sales transactions. The purpose of the hedge program is to protect against the reduction in the dollar value of foreign currency sales from adverse exchange rate movements. Should the dollar strengthen significantly, the decrease in the translated value of the foreign currency sales should be partially offset by gains on the hedge contracts. Depending upon the methods used, hedge contracts may limit the benefits from a weakening U.S. dollar.

The use of forward contracts locks in a firm rate and eliminates any downside risk from an adverse rate movement as well as any benefit from a favorable rate movement. The Company may from time to time choose to hedge with options or a tandem of options, known as a collar. These hedging techniques can limit or eliminate the downside risk but can allow for some or all of the benefit from a favorable rate movement to be realized. Unlike a forward contract, a premium is paid for an option; collars, which are a combination of a put and call option, may have a net premium but can be structured to be cash neutral. The Company will primarily hedge with forward contracts due to the relationship between the cash outlay and the level of risk.

The use of foreign currency derivative contracts is governed by policies approved by the Audit Committee of the Board of Directors. A team consisting of senior financial managers reviews the estimated exposure levels, as defined by budgets,

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forecasts, and other internal data, and determines the timing, amounts, and instruments to use to hedge that exposure within the confines of the policy. Management analyzes the effective hedged rates and the actual and projected gains and losses on the hedging transactions against the program objectives, targeted rates, and levels of risk assumed. Hedge contracts are typically layered in at different times for a specified exposure period in order to minimize the impact of rate movements.

**Precious Metals.** The Company maintains the majority of its precious metal production requirements on consignment in order to reduce its working capital investment and the exposure to metal price movements. When a precious metal product is fabricated and ready for shipment to the customer, the metal is purchased out of consignment at the current market price. The price paid by the Company forms the basis for the price charged to the customer. This methodology allows for changes in either direction in the market prices of the precious metals used by the Company to be passed through to the customer, and reduces the impact changes in prices could have on the Company's margins and operating profit. The consigned metal is owned by financial institutions that charge the Company a financing fee based upon the current value of the metal on hand.

In certain instances, a customer may want to establish the price for the precious metal at the time the sales order is placed rather than at the time of shipment. Setting the sales price at a different date than when the material would be purchased potentially creates an exposure to movements in the market price of the metal. Therefore, in these limited situations, the Company may elect to enter into a forward contract to purchase precious metal. The forward contract allows the Company to purchase metal at a fixed price on a specific future date. The price in the forward contract serves as the basis for the price to be charged to the customer. By doing so, the selling price and purchase price are matched, and the Company's price exposure is reduced.

The Company refines precious metal-containing materials for its customers and typically will purchase the refined metal from the customer at current market prices. In limited circumstances, the customer may want to fix the price to be paid at the time of the order as opposed to when the material is refined. The customer may also want to fix the price for a set period of time. The Company may then elect to enter into a hedge contract, either a forward contract or a swap, to fix the price for the estimated quantity of metal to be purchased, thereby reducing the exposure to adverse movements in the price of the metal.

In certain circumstances, the Company also refines metal from the customer and may retain a portion of the refined metal as payment. The Company may elect to enter into a forward contract to sell precious metal to reduce the Company's price exposure.

The Company may from time to time elect to purchase precious metal and hold in inventory rather than on consignment due to potential credit line limitations or other factors. These purchases are typically held for a short duration. A forward contract will be secured at the time of the purchase to fix the price to be used when the metal is transferred back to the consignment line, thereby limiting any price exposure during the time when the metal was owned.

**Copper.** We also use copper in our production processes. When possible, fluctuations in the purchase price of copper are passed on to customers in the form of price adders or reductions. While over time our price exposure to copper is generally in balance, there can be a lag between the change in our cost and the pass-through to our customers, resulting in higher or lower margins in a given period. To mitigate this impact, we hedge a portion of this pricing risk.

The Company will only enter into a derivative contract if there is an underlying identified exposure. Contracts are typically held until maturity. The Company does not engage in derivative trading activities and does not use derivatives for speculative purposes. The Company only uses currency hedge contracts that are denominated in the same currency as the underlying exposure and precious metal hedge contracts denominated in the same metal as the underlying exposure.

All derivatives are recorded on the balance sheet at fair value. If the derivative is designated and effective as a cash flow hedge, changes in the fair value of the derivative are recognized in other comprehensive income (OCI) until the hedged item is recognized in earnings. If a derivative is not a hedge, changes in the fair value are adjusted through income. The fair values of the outstanding derivatives are recorded on the balance sheet as assets (if the derivatives are in a gain position) or liabilities (if the derivatives are in a loss position). The fair values will also be classified as short-term or long-term depending upon their maturity dates.



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The following table summarizes the notional amount and the fair value of the Company's outstanding derivatives not designated as hedging instruments (on a gross basis) and balance sheet classification as of September 27, 2019 and December 31, 2018:

| (Thousands)                         | September 27, 2019 |            | December 31, 2018 |            |
|-------------------------------------|--------------------|------------|-------------------|------------|
|                                     | Notional Amount    | Fair Value | Notional Amount   | Fair Value |
| Foreign currency forward contracts  |                    |            |                   |            |
| Prepaid expenses                    | \$ 4,316           | \$ 95      | \$ 8,767          | \$ 244     |
| Other liabilities and accrued items | 18,644             | 36         | 8,771             | 249        |

These outstanding foreign currency derivatives were related to balance sheet hedges and intercompany loans. Other-net included \$0.3 million of foreign currency gains relating to these derivatives during both the third quarter and the first nine months of 2019 and included \$0.4 million and \$1.6 million of foreign currency gains during the third quarter and first nine months of 2018, respectively.

The following table summarizes the notional amount and the fair value of the Company's outstanding derivatives designated as cash flow hedges (on a gross basis) and balance sheet classification as of September 27, 2019 and December 31, 2018:

| (Thousands)                               | September 27, 2019 |            | December 31, 2018 |            |
|---|--------------------|------------|-------------------|------------|
|   | Notional Amount    | Fair Value | Notional Amount   | Fair Value |
| Prepaid expenses                          |                    |            |                   |            |
| Foreign currency forward contracts - yen  | \$ 1,000           | \$ 14      | \$ —              | \$ —       |
| Foreign currency forward contracts - euro | 8,082              | 369        | 725               | 2          |
| Precious metal swaps                      | 156                | 4          | 4,533             | 237        |
| Copper swaps                              | 517                | 10         | —                 | —          |
| Total                                     | 9,755              | 397        | 5,258             | 239        |
| Other assets                              |                    |            |                   |            |
| Precious metal swaps                      | 626                | 14         | —                 | —          |
| Total                                     | 626                | 14         | —                 | —          |
| Other liabilities and accrued items       |                    |            |                   |            |
| Foreign currency forward contracts - yen  | 944                | 9          | 1,264             | 17         |
| Foreign currency forward contracts - euro | —                  | —          | 19,158            | 166        |
| Precious metal swaps                      | 9,342              | 949        | 2,864             | 135        |
| Copper swaps                              | 2,686              | 41         | 11,170            | 569        |
| Total                                     | 12,972             | 999        | 34,456            | 887        |
| Other long-term liabilities               |                    |            |                   |            |
| Precious metal swaps                      | 1,169              | 52         | —                 | —          |
| Total                                     | \$ 24,522          | \$ 640     | \$ 39,714         | \$ 648     |

All of these contracts were designated and effective as cash flow hedges. The Company expects to relieve substantially the entire balance in OCI as of September 27, 2019 to the Consolidated Statements of Income within the next 15-month period. Refer to Note L for additional OCI details.

**Materion Corporation and Subsidiaries**  
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The following table summarizes the amounts reclassified from accumulated other comprehensive income relating to the hedging relationship of the Company's outstanding derivatives designated as cash flow hedges and income statement classification as of the third quarter and first nine months of 2019:

| (Thousands) | Hedging relationship               | Line item     | Third Quarter Ended |            | Nine Months Ended |            |
|-------------|------------------------------------|---------------|---------------------|------------|-------------------|------------|
|             |                                    |               | Sept. 27, 2019      |            | Sept. 27, 2019    |            |
|             | Foreign currency forward contracts | Net sales     | \$                  | (3)        | \$                | (47)       |
|             | Precious metal swaps               | Cost of sales |                     | 343        |                   | 281        |
|             | Copper swaps                       | Cost of sales |                     | 413        |                   | 505        |
|             | <b>Total</b>                       |               | <b>\$</b>           | <b>753</b> | <b>\$</b>         | <b>739</b> |

**Note P — Contingencies**

**Legal Proceedings.** For general information regarding legal proceedings relating to *Chronic Beryllium Disease Claims*, refer to Note S ("Contingencies and Commitments") in the Company's 2018 Annual Report on Form 10-K.

One beryllium case, originally filed and dismissed during 2015, but reversed and remanded in 2016 to the trial court, was outstanding as of December 31, 2018. That case was settled for an immaterial amount in the third quarter of 2019 and dismissed.

In addition, during the third quarter of 2019, one new beryllium case was filed, although the Company was not served until the fourth quarter of 2019. The Company does not expect the resolution of this matter to have a material impact on the consolidated financial statements.

**Other Litigation.** The Company is party to several pending legal proceedings and claims arising in the normal course of business. The Company records a liability when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. In the event the Company determines that a loss is not probable, but is reasonably possible, and it becomes possible to develop what the Company believes to be a reasonable range of possible loss, then the Company will include disclosure related to such matters. To the extent there is a reasonable possibility that the losses could exceed any amounts accrued, the Company will adjust the accrual in the period the determination is made, disclose an estimate of the additional loss or range of loss, indicate that the estimate is immaterial with respect to its financial statements as a whole or, if the amount of such adjustment cannot be reasonably estimated, disclose that an estimate cannot be made.

**Environmental Proceedings.** The Company has an active environmental compliance program and records reserves for the probable cost of identified environmental remediation projects. The reserves are established based upon analyses conducted by the Company's engineers and outside consultants and are adjusted from time to time based upon ongoing studies, the difference between actual and estimated costs, and other factors. The reserves may also be affected by rulings and negotiations with regulatory agencies. The undiscounted reserve balance was \$6.1 million and \$6.5 million at September 27, 2019 and December 31, 2018, respectively. Environmental projects tend to be long-term, and the final actual remediation costs may differ from the amounts currently recorded.

**Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

**OVERVIEW**

We are an integrated producer of high-performance advanced engineered materials used in a variety of electrical, electronic, thermal, and structural applications. Our products are sold into numerous end markets, including semiconductor, industrial, aerospace and defense, automotive, consumer electronics, energy, and telecom and data center.

## RESULTS OF OPERATIONS

### Third Quarter

| (Thousands, except per share data)                  | Third Quarter Ended |                   |              |             |
|---|---------------------|-------------------|--------------|-------------|
|   | Sept. 27,<br>2019   | Sept. 28,<br>2018 | \$<br>Change | %<br>Change |
| Net sales   | \$ 305,979          | \$ 297,193        | \$ 8,786     | 3 %         |
| Value-added sales                                   | 188,598             | 181,943           | 6,655        | 4 %         |
| Gross margin  | 64,945              | 64,935            | 10           | — %         |
| Gross margin as a % of value-added sales            | 34%                 | 36%               |              |             |
| Selling, general, and administrative (SG&A) expense | 36,311              | 38,872            | (2,561)      | (7)%        |
| SG&A expense as a % of value-added sales            | 19%                 | 21%               |              |             |
| Research and development (R&D) expense              | 5,262               | 4,250             | 1,012        | 24 %        |
| R&D expense as a % of value-added sales             | 3%                  | 2%                |              |             |
| Goodwill impairment charges                         | 11,560              | —                 | 11,560       | N/A         |
| Asset impairment charges                            | 2,581               | —                 | 2,581        | N/A         |
| Other—net   | 2,942               | 3,147             | (205)        | (7)%        |
| Operating profit                                    | 6,289               | 18,666            | (12,377)     | (66)%       |
| Interest expense—net                                | 436                 | 613               | (177)        | (29)%       |
| Other non-operating expense—net                     | 127                 | 800               | (673)        | (84)%       |
| Income before income taxes                          | 5,726               | 17,253            | (11,527)     | (67)%       |
| Income tax expense (benefit)                        | 2,263               | (2,713)           | 4,976        | (183)%      |
| Net income  | \$ 3,463            | \$ 19,966         | \$ (16,503)  | (83)%       |
| Diluted earnings per share                          | \$ 0.17             | \$ 0.97           | \$ (0.80)    | (82)%       |

N/A = Not Applicable

**Net sales** of \$306.0 million in the third quarter of 2019 increased \$8.8 million from \$297.2 million in the third quarter of 2018. Net sales growth in our Performance Alloys and Composites and Advanced Materials segments was partially offset by decreased net sales in our Precision Coatings segment driven by lower sales of blood glucose test strip products. The change in precious metal and copper prices favorably impacted net sales during the third quarter of 2019 by \$17.4 million.

**Value-added sales** is a non-GAAP financial measure that removes the impact of pass-through metal costs and allows for analysis without the distortion of the movement or volatility in metal prices and changes in mix due to customer-supplied material. Internally, we manage our business on this basis, and a reconciliation of net sales, the most directly comparable GAAP financial measure, to value-added sales is included herein. Value-added sales of \$188.6 million in the third quarter of 2019 increased \$6.7 million, or 4%, compared to the third quarter of 2018. The increase in value-added sales was primarily driven by strong demand in the aerospace and defense end market and the timing of beryllium hydroxide shipments.

**Gross margin** in the third quarter of 2019 was \$64.9 million, which was flat compared to the third quarter of 2018. Gross margin expressed as a percentage of value-added sales decreased to 34% in the third quarter of 2019 from 36% in the third quarter of 2018. The decrease was primarily driven by unfavorable sales mix and manufacturing yields in the Advanced Materials segment.

**SG&A expense** was \$36.3 million in the third quarter of 2019, compared to \$38.9 million in the third quarter of 2018. The decrease in SG&A expense for the third quarter of 2019 was primarily driven by lower variable expenses related to financial targets. Expressed as a percentage of value-added sales, SG&A expense was 19% and 21% in the third quarter of 2019 and 2018, respectively.

**R&D expense** consists primarily of direct personnel costs for pre-production evaluation and testing of new products, prototypes, and applications. R&D expense accounted for 3% and 2% of value-added sales in the third quarter of 2019 and 2018, respectively. The \$1.0 million increase reflects additional investment in new product and application development.

**Goodwill and Asset impairment charges** includes non-recurring charges relating to goodwill and other assets in our Precision Coatings segment. Refer to Note F to the Consolidated Financial Statements for additional discussion.

**Other-net** was \$2.9 million of expense in the third quarter of 2019, or a \$0.2 million decrease from the third quarter of 2018. Refer to Note D to the Consolidated Financial Statements for details of the major components within Other-net.

**Interest expense-net** was \$0.4 million and \$0.6 million in the third quarter of 2019 and 2018, respectively.

**Other non-operating expense-net** includes components of pension and post-retirement expense other than service costs. Refer to Note K to the Consolidated Financial Statements for details of the components of net periodic benefit costs.

**Income tax expense** for the third quarter of 2019 was \$2.3 million compared to a \$2.7 million benefit in the third quarter of 2018. The effective tax rate for the third quarter of 2019 was 39.5% compared to a negative effective tax rate of 15.7% in the prior-year period. The effective tax rate in the third quarter of 2019 was higher than the statutory rate primarily due to discrete expense of \$1.8 million. The effect of discrete benefits of \$6.1 million was the primary factor for the difference between the effective and statutory rates in the third quarter of 2018. Refer to Note G to the Consolidated Financial Statements for further details on income taxes.

### Nine Months

| (Thousands, except per share data)       | Nine Months Ended |                   |              |             |
|--|-------------------|-------------------|--------------|-------------|
|  | Sept. 27,<br>2019 | Sept. 28,<br>2018 | \$<br>Change | %<br>Change |
| Net sales                                | \$ 905,263        | \$ 909,745        | \$ (4,482)   | — %         |
| Value-added sales                        | 571,175           | 553,158           | 18,017       | 3 %         |
| Gross margin                             | 203,851           | 185,053           | 18,798       | 10 %        |
| Gross margin as a % of value-added sales | 36%               | 33%               |              |             |
| SG&A expense                             | 116,266           | 115,807           | 459          | — %         |
| SG&A expense as a % of value-added sales | 20%               | 21%               |              |             |
| R&D expense                              | 13,064            | 11,753            | 1,311        | 11 %        |
| R&D expense as a % of value-added sales  | 2%                | 2%                |              |             |
| Goodwill impairment charges              | 11,560            | —                 | 11,560       | N/A         |
| Asset impairment charges                 | 2,581             | —                 | 2,581        | N/A         |
| Other—net                                | 9,954             | 10,384            | (430)        | (4)%        |
| Operating profit                         | 50,426            | 47,109            | 3,317        | 7 %         |
| Interest expense—net                     | 1,402             | 2,010             | (608)        | (30)%       |
| Other non-operating expense—net          | 3,484             | 1,679             | 1,805        | 108 %       |
| Income before income taxes               | 45,540            | 43,420            | 2,120        | 5 %         |
| Income tax expense                       | 9,631             | 1,746             | 7,885        | 452 %       |
| Net income                               | \$ 35,909         | \$ 41,674         | \$ (5,765)   | (14)%       |
| Diluted earnings per share               | \$ 1.74           | \$ 2.02           | \$ (0.28)    | (14)%       |

N/A = Not Applicable

**Net sales** of \$905.3 million in the first nine months of 2019 decreased \$4.4 million from \$909.7 million recorded in the first nine months of 2018. Net sales growth in our Performance Alloys and Composites segment was more than offset by decreased net sales in our Advanced Materials and Precision Coatings segments, primarily driven by lower mix of precious metal-containing products and the mix of customer-supplied material. The change in precious metal and copper prices favorably impacted net sales during the first nine months of 2019 by \$16.7 million.

**Value-added sales** of \$571.2 million in the first nine months of 2019 increased \$18.0 million, or 3%, compared to the first nine months of 2018. The increase in value-added sales was primarily driven by stronger demand in the aerospace and defense end market and higher beryllium hydroxide shipments.

**Gross margin** in the first nine months of 2019 was \$203.9 million, or \$18.8 million higher than the \$185.1 million gross margin recorded during the first nine months of 2018. Gross margin expressed as a percentage of value-added sales increased to 36% in the first nine months of 2019 from 33% in the first nine months of 2018 primarily due to a combination of improved sales mix and improved manufacturing performance in the Performance Alloys and Composites segment.

**SG&A expense** was \$116.3 million in the first nine months of 2019, compared to \$115.8 million recorded in the first nine months of 2018. The increase in SG&A expense for the first nine months of 2019 was primarily driven by investments to execute strategic initiatives for commercial excellence. Expressed as a percentage of value-added sales, SG&A expense was 20% and 21% in the first nine months of 2019 and 2018, respectively.

**R&D expense** was flat as a percentage of value-added sales at approximately 2% in the first nine months of both 2019 and 2018. The \$1.3 million increase reflects additional investment in new product and application development.

**Goodwill and Asset impairment charges** includes non-recurring charges relating to goodwill and other assets in our Precision Coatings segment. Refer to Note F to the Consolidated Financial Statements for additional discussion.

**Other-net** was \$10.0 million of expense in the first nine months of 2019, or a \$0.4 million decrease from the first nine months of 2018. Refer to Note D to the Consolidated Financial Statements for details of the major components within Other-net.

**Interest expense-net** was \$1.4 million and \$2.0 million in the first nine months of 2019 and 2018, respectively.

**Other non-operating expense-net** includes components of pension and post-retirement expense other than service costs and a non-cash pre-tax pension curtailment charge of \$3.3 million, recorded in the second quarter of 2019, associated with the pension plan amendment to freeze the pay and service amounts used to calculate pension benefits effective December 31, 2019. Refer to Note K to the Consolidated Financial Statements for details of the components of net periodic benefit costs.

**Income tax expense** for the first nine months of 2019 was \$9.6 million, compared to \$1.7 million in the first nine months of 2018. The effective tax rate for the first nine months of 2019 was 21.1% compared to an effective tax rate of 4.0% in the prior-year period. The effective tax rate for the first nine months of 2019 is higher than the statutory tax rate primarily due to discrete expense of \$1.3 million. The effect of discrete benefits of \$7.1 million was the primary factor for the difference between the effective and statutory rates in the first nine months of 2018. Refer to Note G to the Consolidated Financial Statements for further details on income taxes.

## Value-Added Sales - Reconciliation of Non-GAAP Financial Measure

A reconciliation of net sales to value-added sales, a non-GAAP financial measure, for each reportable segment and for the total Company for the third quarter and first nine months of 2019 and 2018 is as follows:

| (Thousands)                           | Third Quarter Ended |                   | Nine Months Ended |                   |
|---------------------------------------|---------------------|-------------------|-------------------|-------------------|
|                                       | Sept. 27,           | Sept. 28,         | Sept. 27,         | Sept. 28,         |
|                                       | 2019                | 2018              | 2019              | 2018              |
| <b>Net sales</b>                      |                     |                   |                   |                   |
| Performance Alloys and Composites     | \$ 130,704          | \$ 124,103        | \$ 393,048        | \$ 372,104        |
| Advanced Materials                    | 147,650             | 144,072           | 424,913           | 447,941           |
| Precision Coatings                    | 27,625              | 29,018            | 87,302            | 89,700            |
| Other                                 | —                   | —                 | —                 | —                 |
| <b>Total</b>                          | <b>\$ 305,979</b>   | <b>\$ 297,193</b> | <b>\$ 905,263</b> | <b>\$ 909,745</b> |
| <b>Less: pass-through metal costs</b> |                     |                   |                   |                   |
| Performance Alloys and Composites     | \$ 18,747           | \$ 19,210         | \$ 56,247         | \$ 56,762         |
| Advanced Materials                    | 92,040              | 88,727            | 253,489           | 277,046           |
| Precision Coatings                    | 5,183               | 6,013             | 19,234            | 19,661            |
| Other                                 | 1,411               | 1,300             | 5,118             | 3,118             |
| <b>Total</b>                          | <b>\$ 117,381</b>   | <b>\$ 115,250</b> | <b>\$ 334,088</b> | <b>\$ 356,587</b> |
| <b>Value-added sales</b>              |                     |                   |                   |                   |
| Performance Alloys and Composites     | \$ 111,957          | \$ 104,893        | \$ 336,801        | \$ 315,342        |
| Advanced Materials                    | 55,610              | 55,345            | 171,424           | 170,895           |
| Precision Coatings                    | 22,442              | 23,005            | 68,068            | 70,039            |
| Other                                 | (1,411)             | (1,300)           | (5,118)           | (3,118)           |
| <b>Total</b>                          | <b>\$ 188,598</b>   | <b>\$ 181,943</b> | <b>\$ 571,175</b> | <b>\$ 553,158</b> |

The cost of gold, silver, platinum, palladium, and copper can be quite volatile. Our pricing policy is to directly pass the cost of these metals on to the customer in order to mitigate the impact of metal price volatility on our results from operations. Trends and comparisons of net sales are affected by movements in the market prices of these metals, but changes in net sales due to metal price movements may not have a proportionate impact on our profitability.

Internally, management reviews net sales on a value-added basis. Value-added sales is a non-GAAP financial measure that deducts the value of the pass-through metal costs from net sales. Value-added sales allow management to assess the impact of differences in net sales between periods, segments, or markets, and analyze the resulting margins and profitability without the distortion of movements in pass-through metal costs. The dollar amount of gross margin and operating profit is not affected by the value-added sales calculation. We sell other metals and materials that are not considered direct pass-throughs, and these costs are not deducted from net sales when calculating value-added sales. Non-GAAP financial measures, such as value-added sales, have inherent limitations and should not be considered in isolation, or as a substitute for analyses of results as reported under GAAP.

Our net sales are also affected by changes in the use of customer-supplied metal. When we manufacture a precious metal product, the customer may purchase metal from us or may elect to provide its own metal, in which case we process the metal on a toll basis and the metal value does not flow through net sales or cost of sales. In either case, we generally earn our margin based upon our fabrication efforts. The relationship of this margin to net sales can change depending upon whether or not the product was made from our metal or the customer's metal. The use of value-added sales removes the potential distortion in the comparison of net sales caused by changes in the level of customer-supplied metal.

By presenting information on net sales and value-added sales, it is our intention to allow users of our financial statements to review our net sales with and without the impact of the pass-through metals.

### Segment Results

The Company consists of four reportable segments: Performance Alloys and Composites, Advanced Materials, Precision Coatings, and Other. The Other reportable segment includes unallocated corporate costs.

## Performance Alloys and Composites

### Third Quarter

| (Thousands)       | Third Quarter Ended |            |          |        |
|-------------------|---------------------|------------|----------|--------|
|                   | Sept. 27,           | Sept. 28,  | \$       | %      |
|                   | 2019                | 2018       | Change   | Change |
| Net sales         | \$ 130,704          | \$ 124,103 | \$ 6,601 | 5%     |
| Value-added sales | 111,957             | 104,893    | 7,064    | 7%     |
| Operating profit  | 18,780              | 16,728     | 2,052    | 12%    |

Net sales from the Performance Alloys and Composites segment of \$130.7 million in the third quarter of 2019 were 5% higher than net sales of \$124.1 million in the third quarter of 2018. Higher aerospace and defense end market sales and beryllium hydroxide shipments more than offset softness in the automotive end market.

Value-added sales of \$112.0 million in the third quarter of 2019 were 7% higher than value-added sales of \$104.9 million in the third quarter of 2018. The increase in value-added sales was due to the same factors driving the increase in net sales.

Performance Alloys and Composites generated operating profit of \$18.8 million in the third quarter of 2019 compared to \$16.7 million in the third quarter of 2018. The increase in operating profit was primarily due to sales growth and favorable product mix.

### Nine Months

| (Thousands)       | Nine Months Ended |            |           |        |
|-------------------|-------------------|------------|-----------|--------|
|                   | Sept. 27,         | Sept. 28,  | \$        | %      |
|                   | 2019              | 2018       | Change    | Change |
| Net sales         | \$ 393,048        | \$ 372,104 | \$ 20,944 | 6%     |
| Value-added sales | 336,801           | 315,342    | 21,459    | 7%     |
| Operating profit  | 57,066            | 38,898     | 18,168    | 47%    |

Net sales from the Performance Alloys and Composites segment of \$393.0 million in the first nine months of 2019 were 6% higher than net sales of \$372.1 million in the first nine months of 2018. Higher aerospace and defense end market sales and beryllium hydroxide shipments more than offset softness in the automotive end market.

Value-added sales of \$336.8 million in the first nine months of 2019 were 7% higher than value-added sales of \$315.3 million in the first nine months of 2018. The increase in value-added sales was due to the same factors driving the increase in net sales.

Performance Alloys and Composites generated operating profit of \$57.1 million in the first nine months of 2019 compared to \$38.9 million in the first nine months of 2018. The increase in operating profit was primarily due to favorable product mix, sales growth, and improved manufacturing performance.

## Advanced Materials

### Third Quarter

| (Thousands)       | Third Quarter Ended |            |        |        |
|-------------------|---------------------|------------|--------|--------|
|                   | Sept. 27,           | Sept. 28,  | \$     | %      |
|                   | 2019                | 2018       | Change | Change |
| Net sales         | \$ 147,650          | \$ 144,072 | 3,578  | 2%     |
| Value-added sales | 55,610              | 55,345     | 265    | —%     |
| Operating profit  | 6,202               | 6,882      | (680)  | (10)%  |

Net sales from the Advanced Materials segment of \$147.7 million in the third quarter of 2019 were 2% higher than net sales of \$144.1 million in the third quarter of 2018. The increase in net sales was primarily due to the impact of favorable pass-through metal prices of \$16.7 million, partially offset by a lower mix of precious metal-containing products and the mix of customer-supplied material.

Value-added sales of \$55.6 million in the third quarter of 2019 were relatively flat compared to value-added sales of \$55.3 million in the third quarter of 2018.

The Advanced Materials segment generated operating profit of \$6.2 million in the third quarter of 2019 compared to \$6.9 million in the third quarter of 2018. Decreased operating profit in the third quarter of 2019, compared to 2018, was the result of cost savings offset by unfavorable sales mix and manufacturing performance.

### *Nine Months*

| (Thousands)       | Nine Months Ended |            |          |        |
|-------------------|-------------------|------------|----------|--------|
|                   | Sept. 27,         | Sept. 28,  | \$       | %      |
|                   | 2019              | 2018       | Change   | Change |
| Net sales         | \$ 424,913        | \$ 447,941 | (23,028) | (5)%   |
| Value-added sales | 171,424           | 170,895    | 529      | — %    |
| Operating profit  | 19,421            | 18,352     | 1,069    | 6 %    |

Net sales from the Advanced Materials segment of \$424.9 million in the first nine months of 2019 were 5% lower than net sales of \$447.9 million in the first nine months of 2018. The decline in net sales was due to the lower mix of precious metal-containing products and the mix of customer-supplied material, partially offset by the impact of favorable pass-through metal prices of \$15.9 million.

Value-added sales of \$171.4 million in the first nine months of 2019 were relatively flat, compared to value-added sales of \$170.9 million in the first nine months of 2018.

The Advanced Materials segment generated operating profit of \$19.4 million in the first nine months of 2019 compared to \$18.4 million in the first nine months of 2018. Increased operating profit in the first nine months of 2019, compared to the first nine months of 2018, was the result of cost savings realized primarily from restructuring actions taken in the fourth quarter of 2018, partially offset by reduced manufacturing yields and unfavorable sales mix.

### **Precision Coatings**

#### *Third Quarter*

| (Thousands)             | Third Quarter Ended |           |          |        |
|-------------------------|---------------------|-----------|----------|--------|
|                         | Sept. 27,           | Sept. 28, | \$       | %      |
|                         | 2019                | 2018      | Change   | Change |
| Net sales               | \$ 27,625           | \$ 29,018 | (1,393)  | (5)%   |
| Value-added sales       | 22,442              | 23,005    | (563)    | (2)%   |
| Operating (loss) profit | (11,198)            | 3,499     | (14,697) | (420)% |

Net sales from the Precision Coatings segment of \$27.6 million in the third quarter of 2019 decreased 5% compared to net sales of \$29.0 million in the third quarter of 2018 primarily due to reduced sales volumes, partially offset by the favorable impact of pass-through precious metal prices of \$1.6 million.

Value-added sales of \$22.4 million in the third quarter of 2019 decreased 2% compared to value-added sales of \$23.0 million in the third quarter of 2018. The decrease is primarily due to a \$1.6 million reduction in value-added sales related to blood glucose test strip products, partially offset by \$0.9 million of increased value-added sales into the consumer electronics end market.

The Precision Coatings segment generated an operating loss of \$11.2 million in the third quarter of 2019, compared to an operating profit of \$3.5 million in the third quarter of 2018. The operating loss was driven by a goodwill impairment charge of \$11.6 million and an other assets impairment charge of \$2.6 million related to our Large Area Coatings (LAC) business, as well as \$0.3 million of restructuring actions taken in the third quarter of 2019.



## Nine Months

| (Thousands)             | Nine Months Ended |           |          |        |
|-------------------------|-------------------|-----------|----------|--------|
|                         | Sept. 27,         | Sept. 28, | \$       | %      |
|                         | 2019              | 2018      | Change   | Change |
| Net sales               | \$ 87,302         | \$ 89,700 | (2,398)  | (3)%   |
| Value-added sales       | 68,068            | 70,039    | (1,971)  | (3)%   |
| Operating (loss) profit | (5,184)           | 9,107     | (14,291) | (157)% |

Net sales from the Precision Coatings segment of \$87.3 million in the first nine months of 2019 decreased 3% compared to net sales of \$89.7 million in the first nine months of 2018 due to decreased sales volume, partially offset by a \$3.8 million favorable impact of pass-through precious metal prices.

Value-added sales of \$68.1 million in the first nine months of 2019 decreased 3% compared to value-added sales of \$70.0 million in the first nine months of 2018. The decrease was driven by reduced value-added sales related to blood glucose test trip products, partially offset by increased value-added sales of \$2.2 million into the industrial end market.

The Precision Coatings segment generated operating loss of \$5.2 million in the first nine months of 2019, compared to an operating profit of \$9.1 million in the first nine months of 2018. The decrease in operating profit was driven by a goodwill impairment charge of \$11.6 million and an other assets impairment charge of \$2.6 million related to our LAC business, as well as \$0.3 million of restructuring actions taken in the third quarter of 2019.

## Other

### Third Quarter

| (Thousands)       | Third Quarter Ended |           |        |        |
|-------------------|---------------------|-----------|--------|--------|
|                   | Sept. 27,           | Sept. 28, | \$     | %      |
|                   | 2019                | 2018      | Change | Change |
| Net sales         | \$ —                | \$ —      | —      | —%     |
| Value-added sales | (1,411)             | (1,300)   | (111)  | 9%     |
| Operating loss    | (7,495)             | (8,443)   | 948    | (11)%  |

The Other reportable segment in total includes unallocated corporate costs.

Corporate costs of \$7.5 million in the third quarter of 2019 decreased \$0.9 million as compared to \$8.4 million in the third quarter of 2018. Corporate costs accounted for 4% and 5% of Company-wide value-added sales in the third quarter of 2019 and 2018, respectively. The decrease in corporate costs in the third quarter of 2019, compared to the third quarter of 2018, is reflective of lower variable expenses related to financial targets.

## Nine Months

| (Thousands)       | Nine Months Ended |           |         |        |
|-------------------|-------------------|-----------|---------|--------|
|                   | Sept. 27,         | Sept. 28, | \$      | %      |
|                   | 2019              | 2018      | Change  | Change |
| Net sales         | \$ —              | \$ —      | —       | —%     |
| Value-added sales | (5,118)           | (3,118)   | (2,000) | 64%    |
| Operating loss    | (20,877)          | (19,248)  | (1,629) | 8%     |

Corporate costs of \$20.9 million in the first nine months of 2019 increased \$1.6 million as compared to \$19.2 million in the first nine months of 2018. Corporate costs accounted for 4% and 3% of Company value-added sales in the first nine months of 2019 and 2018, respectively. The increase in corporate costs in the first nine months of 2019, compared to the first nine months of 2018, is primarily due to investments to execute strategic initiatives.

## FINANCIAL POSITION

### Cash Flow

A summary of cash flows provided by (used in) operating, investing, and financing activities is as follows:

| (Thousands)                               | Nine Months Ended |           |           |
|---|-------------------|-----------|-----------|
|   | Sept. 27,         | Sept. 28, | \$        |
|   | 2019              | 2018      | Change    |
| Net cash provided by operating activities | \$ 59,536         | \$ 49,243 | \$ 10,293 |
| Net cash used in investing activities     | (20,079)          | (26,975)  | 6,896     |
| Net cash used in financing activities     | (15,154)          | (10,354)  | (4,800)   |
| Effects of exchange rate changes          | (422)             | (146)     | (276)     |
| Net change in cash and cash equivalents   | \$ 23,881         | \$ 11,768 | \$ 12,113 |

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**Net cash provided by operating activities** totaled \$59.5 million in the first nine months of 2019 versus \$49.2 million in the comparable prior-year period. During the first nine months of 2019, we contributed \$4.5 million to our domestic pension plan, compared to contributions of \$38.0 million in the first nine months of 2018. Working capital requirements used cash of \$28.2 million during the first nine months of 2019 compared to a use of \$0.8 million in the first nine months of 2018. Cash flows used for accounts receivable were \$25.9 million higher than the prior-year period. Three-month trailing days sales outstanding was approximately 43 days at September 27, 2019 and 41 days at December 31, 2018. Inventory reduction initiatives generated a cash flow benefit of \$22.1 million in the first nine months of 2019 compared to a benefit of \$19.8 million in first nine months of 2018, related primarily to our Performance Alloys and Composites business. Cash flows used for accounts payable and accrued expenses were \$14.1 million compared to the prior-year period use of cash of \$10.3 million due to higher incentive compensation payments tied to improved financial performance.

**Net cash used in investing activities** was \$20.1 million in the first nine months of 2019 compared to \$27.0 million in the prior-year period due to lower levels of capital spending.

Capital expenditures are made primarily for new product development, replacing and upgrading equipment, infrastructure investments, and implementing information technology initiatives. For the full year 2019, the Company expects payments for property, plant, and equipment to be approximately \$25.0 million and mine development expenditures to be approximately \$2.0 million.

**Net cash used in financing activities** totaled \$15.2 million in the first nine months of 2019 versus \$10.4 million used in financing activities in the comparable prior-year period. The increase in cash used is primarily due to deferred financing costs recorded in 2019 related to our credit and precious metal consignment agreements, as well as higher payments of withholding taxes for stock-based compensation awards.

### **Liquidity**

We believe cash flow from operations plus the available borrowing capacity and our current cash balance are adequate to support operating requirements, capital expenditures, projected pension plan contributions, the current dividend and share repurchase program, environmental remediation projects, and strategic acquisitions. At September 27, 2019, cash and cash equivalents held by our foreign operations totaled \$16.8 million. We do not expect restrictions on repatriation of cash held outside of the United States to have a material effect on our overall liquidity, financial condition, or results of operations for the foreseeable future.

A summary of key data relative to our liquidity, including outstanding debt, cash, and available borrowing capacity, as of September 27, 2019 and December 31, 2018 is as follows:

| (Thousands)                  | September 27,<br>2019 | December 31,<br>2018 |
|------------------------------|-----------------------|----------------------|
| Cash and cash equivalents    | \$ 94,526             | \$ 70,645            |
| Total outstanding debt       | 2,429                 | 3,041                |
| Net cash                     | \$ 92,097             | \$ 67,604            |
| Available borrowing capacity | \$ 368,313            | \$ 275,488           |

Net cash is a non-GAAP financial measure. We are providing this information because we believe it is more indicative of our overall financial position. It is also a measure our management uses to assess financing and other decisions. We believe that based on our typical cash flow generated from operations, we can support a higher leverage ratio in future periods.

The available borrowing capacity in the table above represents the additional amounts that could be borrowed under our revolving credit facility and other secured lines existing as of the end of each period depicted. The applicable debt covenants have been taken into account when determining the available borrowing capacity, including the covenant that restricts the borrowing capacity to a multiple of the twelve-month trailing earnings before interest, income taxes, depreciation and amortization, and other adjustments.

In the third quarter of 2019, we amended and restated the agreement governing our \$375.0 million revolving credit facility (Credit Agreement). The maturity date of the Credit Agreement was extended from 2020 to 2024, and the Credit Agreement provides more favorable interest rates under certain circumstances. In addition, the Credit Agreement provides the Company and its subsidiaries with additional capacity to enter into facilities for the consignment, borrowing, or leasing of precious metals and copper, and provides enhanced flexibility to finance acquisitions and other strategic initiatives. Borrowings under the Credit Agreement are secured by substantially all of the assets of the Company and its direct subsidiaries, with the exception of non-mining real property and certain other assets.

The Credit Agreement allows the Company to borrow money at a premium over LIBOR or prime rate and at varying maturities. The premium resets quarterly according to the terms and conditions available under the agreement. The Credit Agreement includes restrictive covenants relating to restrictions on additional indebtedness, acquisitions, dividends, and stock repurchases. In addition, the Credit Agreement includes covenants subject to a maximum leverage ratio and a minimum fixed charge coverage ratio. We were in compliance with all of our debt covenants as of September 27, 2019 and December 31, 2018. Cash on hand does not affect the covenants or the borrowing capacity under our debt agreements.

Portions of our business utilize off-balance sheet consignment arrangements to finance metal requirements. Expansion of business volumes and/or higher metal prices can put pressure on the consignment line limitations from time to time. In the third quarter of 2019, we entered into a precious metals consignment agreement, maturing on August 27, 2022, which replaced the consignment agreement that would have matured on September 30, 2019. The available and unused capacity under the metal financing lines expiring in August 2022 totaled approximately \$146.9 million as of September 27, 2019, compared to \$133.9 million as of December 31, 2018 under the metal financing lines that expired on September 30, 2019. The availability is determined by Board approved levels and actual line capacity.

In January 2014, our Board of Directors approved a plan to repurchase up to \$50.0 million of our common stock. The timing of the share repurchases will depend on several factors, including market and business conditions, our cash flow, debt levels, and other investment opportunities. There is no minimum quantity requirement to repurchase our common stock for a given year, and the repurchases may be discontinued at any time. In the first nine months of 2019, we repurchased 4,500 shares of our common stock for \$0.2 million. We did not repurchase any of our common shares during the third quarter of 2019. Since the approval of the repurchase plan, we have purchased 1,096,264 shares at a total cost of \$34.9 million.

We paid cash dividends of \$2.2 million and \$6.6 million on our common stock in the third quarter and first nine months of 2019, respectively. We intend to pay a quarterly dividend on an ongoing basis, subject to a determination that the dividend remains in the best interest of our shareholders.

#### OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

We maintain the majority of the precious metals and copper we use in production on a consignment basis in order to reduce our exposure to metal price movements and to reduce our working capital investment. The notional value of off-balance sheet precious metals and copper was \$303.1 million as of September 27, 2019, versus \$316.1 million as of December 31, 2018. We were in compliance with all of the covenants contained in the consignment agreements as of September 27, 2019 and December 31, 2018. For additional information on our contractual obligations, refer to our 2018 Annual Report on Form 10-K.

## CRITICAL ACCOUNTING POLICIES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the inherent use of estimates and management's judgment in establishing those estimates. For additional information regarding critical accounting policies, please refer to our 2018 Annual Report on Form 10-K.

### Impairment of Goodwill and Long-Lived Assets

Goodwill is reviewed annually for impairment or more frequently if impairment indicators arise. The Company conducts its annual goodwill impairment assessment as of first day of the fourth quarter, which was September 29, 2018.

Goodwill is assigned to the reporting unit, which is the operating segment level or one level below the operating segment. Goodwill within the Advanced Materials segment totaled \$50.3 million as of December 31, 2018. Within the Precision Coatings segment, goodwill totaled \$17.9 million and \$20.6 million relating to the Precision Optics and LAC reporting units, respectively, as of December 31, 2018. The remaining \$1.9 million was related to the Beryllium reporting unit within the Performance Alloys and Composites segment.

For the purpose of the goodwill impairment assessment, we have the option to perform a qualitative assessment (commonly referred to as "step zero") to determine whether further quantitative analysis for impairment of goodwill or indefinite-lived intangible assets is necessary. At the September 29, 2018 annual assessment date, we opted to bypass step zero and proceeded to perform a "step one" quantitative assessment for each of our reporting units. The results of the step one indicated that no goodwill impairment existed.

As of September 29, 2018, the Company determined that the fair value of the LAC reporting unit exceeded the carrying value by approximately 50 percent, which indicated no impairment at that time. The sales growth assumption for the LAC reporting unit was based on expected future orders. A key input into our valuation analysis is our sales growth assumptions, which can be impacted by increased competition, pricing pressures, and contract negotiations with new and existing customers. These factors impact both the timing and magnitude of sales of our products. Precious metal prices, particularly palladium used by our LAC reporting unit and its customer base, have fluctuated significantly in recent years. Palladium price movements have increased competitive pricing pressure in the LAC business. The key risk with the precious metal pricing volatility is the possibility that rising prices could deter our customers from purchasing our products, which would adversely affect our net sales and operating profit. During the third quarter of 2019, we did begin to experience a decline in sales volume with a significant customer. Based on an assessment that the decline in sales volume was expected to continue, the Company initiated a restructuring plan at the end of September to reduce LAC's cost structure. The Company considered these factors to be impairment indicators. As a result, the Company performed an interim impairment analysis as of September 27, 2019 related to the LAC reporting unit. The Company first reviewed long-lived assets which resulted in an impairment charge of \$2.6 million. The Company then performed a goodwill impairment analysis which resulted in an \$11.6 million impairment charge. These non-cash charges were recorded in Goodwill impairment charges and Asset impairment charges in the Consolidated Statements of Income. The remaining balance of goodwill for the LAC reporting unit as of the end of the third quarter of 2019 is \$9.0 million. The Company may determine in connection with future impairment tests that some or all of the remaining carrying value of LAC's goodwill balance may be impaired.

### Forward-looking Statements

Portions of the narrative set forth in this document that are not statements of historical or current facts are forward-looking statements. Our actual future performance may materially differ from that contemplated by the forward-looking statements as a result of a variety of factors. These factors include, in addition to those mentioned elsewhere herein:

- Actual net sales, operating rates, and margins for 2019;
- The global economy, including the impact of tariffs and trade agreements;
- The impact of any U.S. Federal Government shutdowns and sequestrations;

- The condition of the markets which we serve, whether defined geographically or by segment, with the major market segments being: semiconductor, industrial, aerospace and defense, automotive, energy, consumer electronics, and telecom and data center;
- Changes in product mix and the financial condition of customers;
- Our success in developing and introducing new products and new product ramp-up rates;
- Our success in passing through the costs of raw materials to customers or otherwise mitigating fluctuating prices for those materials, including the impact of fluctuating prices on inventory values;
- Our success in identifying acquisition candidates and in acquiring and integrating such businesses;
- The impact of the results of acquisitions on our ability to fully achieve the strategic and financial objectives related to these acquisitions;
- Our success in implementing our strategic plans and the timely and successful completion and start-up of any capital projects;
- Other financial and economic factors, including the cost and availability of raw materials (both base and precious metals), physical inventory valuations, metal financing fees, tax rates, exchange rates, pension costs and required cash contributions and other employee benefit costs, energy costs, regulatory compliance costs, the cost and availability of insurance, credit availability, and the impact of the Company's stock price on the cost of incentive compensation plans;
- The uncertainties related to the impact of war, terrorist activities, and acts of God;
- Changes in government regulatory requirements and the enactment of new legislation that impacts our obligations and operations;
- The conclusion of pending litigation matters in accordance with our expectation that there will be no material adverse effects; and
- The risk factors set forth in Part 1, Item 1A of our 2018 Annual Report on Form 10-K.

### **Item 3. Quantitative and Qualitative Disclosures about Market Risk**

For information regarding market risks, refer to Item 7A. Quantitative and Qualitative Disclosures About Market Risk in our 2018 Annual Report on Form 10-K. There have been no material changes in our market risks since the inclusion of this discussion in our 2018 Annual Report on Form 10-K.

### **Item 4. Controls and Procedures**

#### **a) Evaluation of Disclosure Controls and Procedures**

The Company carried out an evaluation under the supervision and with participation of the Company's management, including the chief executive officer and chief financial officer, of the effectiveness of the design and operation of disclosure controls and procedures as of September 27, 2019 pursuant to Rule 13a-15(b) and 15d-15(b) under the Securities Exchange Act of 1934, as amended (Exchange Act). Based on that evaluation, management, including the chief executive officer and chief financial officer, concluded that disclosure controls and procedures are effective as of September 27, 2019.

#### **b) Changes in Internal Control over Financial Reporting**

There have been no changes in the Company's internal control over financial reporting that occurred during the quarter ended September 27, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

As a result of the adoption of the new lease guidance on January 1, 2019, the Company implemented new processes and controls around its leasing arrangements. These changes included creating new accounting policies, implementing a new software solution, and gathering information necessary for disclosures.

## PART II OTHER INFORMATION

### Item 1. Legal Proceedings

Our subsidiaries and our holding company are subject, from time to time, to a variety of civil and administrative proceedings arising out of our normal operations, including, without limitation, product liability claims, health, safety, and environmental claims, and employment-related actions. Among such proceedings are cases alleging that plaintiffs have contracted, or have been placed at risk of contracting, beryllium sensitization or chronic beryllium disease or other lung conditions as a result of exposure to beryllium (beryllium cases). The plaintiffs in beryllium cases seek recovery under negligence and various other legal theories and demand compensatory and often punitive damages, in many cases of an unspecified sum. Spouses of some plaintiffs claim loss of consortium.

As of September 27, 2019, our subsidiary, Materion Brush Inc., was a defendant in one beryllium case. During the third quarter of 2019, one new beryllium case was filed, although the Company was not served until the fourth quarter of 2019. In *Ronald Dwayne Manning v. Arconic Inc. et al.*, case number 19CI000219, filed in the Superior Court of the State of California, Tehama County, the Company is one of four named defendants and 120 Doe defendants; the plaintiff alleges that he contracted beryllium disease from exposures to beryllium-containing products during his employment as an auto mechanic, welder, sprinkler installer, and movie projector operator, and asserts claims for negligence, strict liability, fraudulent concealment, and breach of implied warranties. The plaintiff seeks economic damages, non-economic damages, consequential damages, and punitive damages. The Company believes that it has substantive defenses, and intends to vigorously defend this suit.

The Company has insurance coverage, which may apply, subject to an annual deductible.

During the third quarter of 2019, the Company settled a beryllium case that involved four plaintiffs. The Company was one of six defendants in a case filed on April 7, 2015 in the Superior Court of the State of California, Los Angeles County, titled *Godoy et al. v. The Argen Corporation et al.*, BC578085. This was a survival and wrongful death complaint. The complaint alleged that the decedent worked at H. Kramer & Co. in California and alleged that he worked as a dental lab technician at various dental labs in California, and that he suffered from CBD and other injuries as a result of grinding, melting and handling beryllium-containing products. The complaint alleged causes of action for negligence, strict liability - failure to warn, strict liability - design defect, fraudulent concealment, and breach of implied warranties. Plaintiffs other than the personal representative of the decedent sought compensatory damages. The survival action brought by the decedent's designated personal representative sought all damages sustained by decedent that he would have been entitled to recover had he lived, including punitive damages. On July 30, 2018, the trial court granted summary adjudication in favor of all defendants on the survival action on the ground that the action was barred by the statute of limitations. On August 7, 2018, the Company filed a Notice of Entry of Order Granting Summary Adjudication in Favor of Defendants on Plaintiffs' Survival Action. The entry of this Order by the trial court eliminated the punitive damages claim from the action. Trial in the Godoy case, which was originally scheduled for March 12, 2019, had been continued to September 4, 2019. In the third quarter of 2019, the Company settled this matter for an immaterial amount, and the case was dismissed.

## Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following table presents information with respect to repurchases of common stock made by us during the three months ended September 27, 2019.

| Period                               | Total Number of Shares Purchased (1) | Average Price Paid per Share (1) | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2) | Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (2) |
|--------------------------------------|--------------------------------------|----------------------------------|--|--|
| June 29 through August 2, 2019       | —                                    | \$ —                             | —  | \$ 15,081,991  |
| August 3 through August 30, 2019     | 1,176                                | 59.29                            | —  | 15,081,991   |
| August 31 through September 27, 2019 | —                                    | —                                | —  | 15,081,991   |
| Total                                | 1,176                                | \$ 59.29                         | —  | \$ 15,081,991  |

- (1) Includes 1,176 shares surrendered to the Company in August by employees to satisfy tax withholding obligations on equity awards issued under the Company's stock incentive plan.
- (2) On January 14, 2014, we announced that our Board of Directors had authorized the repurchase of up to \$50.0 million of our common stock. We did not repurchase any shares under this program during the third quarter of 2019. As of September 27, 2019, \$15.1 million may still be purchased under the program.

## Item 4. Mine Safety Disclosures

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K (17 CFR 229.104) is included in Exhibit 95 to this quarterly report on Form 10-Q.

## Item 6. Exhibits

All documents referenced below were filed pursuant to the Exchange Act by Materion Corporation, file number 001-15885, unless otherwise noted.

- 10.1 [Third Amended and Restated Credit Agreement, dated September 24, 2019, by and among Materion Corporation, Materion Netherlands B.V., the other foreign borrowers from time to time party thereto, the financial institutions from time to time party thereto as lenders, JPMorgan Chase Bank, N.A., as administrative agent, Wells Fargo Bank, National Association and Bank of America, N.A., as co-syndication agents, and KeyBank National Association, as documentation agent](#) (filed as Exhibit 10.1 to the Company's Form 8-K filed on September 30, 2019) incorporated herein by reference.
- 10.2 [Metals Consignment Agreement, dated as of August 27, 2019](#) (filed as Exhibit 10.1 to the Company's Form 8-K Filed on August 29, 2019), incorporated herein by reference.
- 31.1 [Certification of Chief Executive Officer](#) required by Rule 13a-14(a) or 15d-14(a)\*
- 31.2 [Certification of Chief Financial Officer](#) required by Rule 13a-14(a) or 15d-14(a)\*
- 32 [Certifications of Chief Executive Officer and Chief Financial Officer](#) required by 18 U.S.C. Section 1350\*
- 95 [Mine Safety Disclosure Pursuant to Section 1503\(a\) of the Dodd-Frank Wall Street Reform and Consumer Protection Act for the period ended September 27, 2019\\*](#)
- 101.INS XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document\*
- 101.SCH Inline XBRL Taxonomy Extension Schema Document\*
- 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document\*
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document\*
- 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document\*
- 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document\*
- 104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in the Exhibit 101 attachments)

\*Submitted electronically herewith.



**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

MATERION CORPORATION

Dated: October 24, 2019

*/s/ Joseph P. Kelley*

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Joseph P. Kelley

Vice President, Finance and Chief Financial Officer  
(Principal Financial and Accounting Officer)

CERTIFICATIONS

I, Jugal K. Vijayvargiya, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Materion Corporation (the “registrant”);
- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
- 5) The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Dated: October 24, 2019

/s/ Jugal K. Vijayvargiya

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Jugal K. Vijayvargiya

President and Chief Executive Officer

CERTIFICATIONS

I, Joseph P. Kelley, certify that:

- 1) I have reviewed this quarterly report on Form 10-Q of Materion Corporation (the “registrant”);
- 2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4) The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
- 5) The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Dated: October 24, 2019

/s/ Joseph P. Kelley

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Joseph P. Kelley

Vice President, Finance and Chief Financial Officer

**Certification Pursuant to  
18 U.S.C. Section 1350,  
As Adopted Pursuant to  
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in connection with the filing of the Quarterly Report on Form 10-Q of Materion Corporation (the "Company") for the quarter ended September 27, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies that, to such officer's knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)), and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Dated: October 24, 2019

*/s/ Jugal K. Vijayvargiya*

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Jugal K. Vijayvargiya  
President and Chief Executive Officer

*/s/ Joseph P. Kelley*

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Joseph P. Kelley  
Vice President, Finance and Chief Financial Officer

**Materion Corporation**

**Mine Safety Disclosure Pursuant to Section 1503(a) of the Dodd-Frank Wall Street Reform and  
Consumer Protection Act for the Fiscal Quarter Ended September 27, 2019**

Materion Natural Resources Inc., a wholly owned subsidiary, operates a beryllium mining complex in the State of Utah which is regulated by both the U.S. Mine Safety and Health Administration (“MSHA”) and state regulatory agencies. We endeavor to conduct our mining and other operations in compliance with all applicable federal, state and local laws and regulations. We present information below regarding certain mining safety and health citations which MSHA has levied with respect to our mining operations.

Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Section 1503(a)”) requires the Company to present certain information regarding mining safety in its periodic reports filed with the Securities and Exchange Commission.

The following table reflects citations, orders and notices issued to Materion Natural Resources Inc. by MSHA during the fiscal quarter ended September 27, 2019 (the “Reporting Period”) and contains certain additional information as required by Section 1503(a) and Item 104 of Regulation S-K, including information regarding mining-related fatalities, proposed assessments from MSHA and legal actions (“Legal Actions”) before the Federal Mine Safety and Health Review Commission, an independent adjudicative agency that provides administrative trial and appellate review of legal disputes arising under the Mine Act.

Included below is the information required by Section 1503(a) with respect to the beryllium mining complex (MSHA Identification Number 4200706) for the Reporting Period:

|  |       |
|--|-------|
| (A) Total number of alleged violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a mine safety or health hazard under Section 104 of the Mine Act for which Materion Natural Resources Inc. received a citation from MSHA | 0     |
| (B) Total number of orders issued under Section 104(b) of the Mine Act   | 0     |
| (C) Total number of citations and orders for alleged unwarrantable failure by Materion Natural Resources Inc. to comply with mandatory health or safety standards under Section 104(d) of the Mine Act   | 0     |
| (D) Total number of alleged flagrant violations under Section 110(b)(2) of the Mine Act  | 0     |
| (E) Total number of imminent danger orders issued under Section 107(a) of the Mine Act   | 0     |
| (F) Total dollar value of proposed assessments from MSHA under the Mine Act  | \$363 |
| (G) Total number of mining-related fatalities  | 0     |
| (H) Received notice from MSHA of a pattern of violations under Section 104(e) of the Mine Act  | No    |
| (I) Received notice from MSHA of the potential to have a pattern of violations under Section 104(e) of the Mine Act  | No    |
| (J) Total number of Legal Actions pending as of the last day of the Reporting Period   | 0     |
| (K) Total number of Legal Actions instituted during the Reporting Period   | 0     |
| (L) Total number of Legal Actions resolved during the Reporting Period   | 0     |